MORRIS, MANNING & MARTIN, LLP

Intellectual Property NewsFlash

www.mmmlaw.com December 2010

Appeals Court in *RCT v. Microsoft* Case Decides That Software Invention Is Not Too "Abstract"

Some Relief in Sight for Software Patents on "Computer Technology"?

On December 8, 2010, the U.S. Court of Appeals for the Federal Circuit (CAFC), applying the Supreme Court's June 2010 decision *Bilski v. Kappos* about patentable subject matter, reinstated patent infringement claims against Microsoft, holding that certain patent claims directed to image halftoning were not "too abstract" to constitute patentable subject matter.

The decision suggests that the courts may not always harshly apply the rationale of the Bilski *v. Kappos* case in cases relating to computer software inventions – at least where those software inventions have some arguable practical applicability to "computer technology." It remains to be seen how, or whether, the case will have any impact on patents relating to other non-computer technologies, and particularly for "business process technology" type patents.

The case is *Research Corporation Technologies, Inc. v. Microsoft Corp*., (no. 2010-1037, Fed. Cir. Dec. 8, 2010). The opinion in the case is available here.

In its June 2010 *Bilski v. Kappos* case, the U.S. Supreme Court addressed a question it had not considered since the early 1980s – namely, when is a computer-implemented process patentable? Although all nine justices were unanimous in agreeing that the claimed invention – a process for hedging risk in commodities transactions - was fatally abstract and therefore unpatentable, the Court split 5 to 4 on the rationale for that outcome. Moreover, the Supreme Court's guidance in that case was minimal. Justice Stevens criticized the decision for failing to establish any meaningful guidelines for distinguishing between unpatentable abstract ideas and patentable subject matter.

The *Bilski v. Kappos* decision contained discussion about two primary but related legal theories for courts to use when deciding whether process-type claims of a patent are directed to patentable subject matter. The first test is whether the claims meet the "machine-or-transformation test." That is, to be patentable subject matter a process recited in a patent claim must be tied to a particular machine, and/or result in the transformation of an article from one state or form to another. This was held by the Supreme Court to be a test – but not necessarily the sole test – for patentability of a process.

The second test is whether the subject matter of the process is "too abstract." This part of the analysis stemmed from many prior decisions of the Supreme Court that laws of nature, physical phenomena, and abstract ideas – including pure mathematical algorithms – are foundational knowledge and cannot be patented *per se*.

The CAFC in the *RCT v. Microsoft* case, attempting to adhere to its instructions from the Supreme Court and following in the legacy of some earlier CAFC cases (discussed below), suggested that if the claimed process has a **practical application** (whatever that is), then a court might find that the claim is not too abstract and is thus patentable. The parties did not dispute, and the CAFC agreed, that the inventors did not purport to have invented laws of nature or physical phenomena. Moreover, the claim was not written in a manner that could readily invoke the machine-or-transformation test. Thus, the CAFC turned to abstractness in its reasoning.

Research Corporation Technologies, Inc. (RCT) asserted six related patents against Microsoft in 2001. The patents all related to halftoning of digital images. "Digital halftoning technology … allows computer displays and printers to render an approximation of an image by using fewer colors or shades of gray than the original image." Microsoft defended itself in part by asserting that the claims were fatally abstract. The trial court agreed and struck down two of the patents on this ground, but on appeal, the CAFC reversed.

The CAFC, applying principles from the *Bilski v. Kappos* case, concluded that the halftoning processes in the RCT patents were not too abstract: "this court perceives nothing abstract in the subject matter of the processes claimed in the [asserted] patents. The … patents claim methods (statutory "processes") for rendering a halftone image of a digital image … . The invention presents functional and palpable applications **in the field of computer technology.**" Slip Op. at 14-15 (emphasis supplied).

Because the claims were not written in a manner that could readily tie the halftoning process to a particular machine, the "tied to a particular machine" prong of the machine-or-transformation test was not applied or even discussed. But it seems that the CAFC missed or deliberately avoided an opportunity to discuss and add clarity to the "transformation of an article" prong of that test, since arguably the halftoning process results in the transformation of the images, and certainly transformation of the data representing the image. There is no suggestion in the opinion that the Court even thought about that prong – or if that prong was even argued by the attorneys.

The CAFC indicated that determinations about patenting of abstract ideas should not be too difficult in most cases or a source of frequent problems for those seeking patents. According to the case, "this court also will not presume to define 'abstract' beyond the recognition that this disqualifying characteristic should exhibit itself so manifestly as to override the broad statutory categories of eligible subject matter and the statutory context that directs primary attention on the patentability criteria of the rest of the Patent Act." Similarly, the court stated that "inventions with **specific applications or improvements to technologies in the marketplace** are not likely to be so abstract that they override the statutory language and framework of the Patent Act." Slip op. at 15 (emphasis supplied).

This author notes that the claimed processes in the RCT patents have applicability in the **physical operations** of computer displays and printers – aspects of "computer technology." However, at a fundamental and philosophical level, it seems hard to distinguish between computed numbers that relate to halftoning of images and computed numbers that relate to determination of business risks, as in the *Bilski v. Kappos* case.

This case seems to be decided on a rationale similar to that used in cases during the 1990s when the CAFC decided that other image and signal processing process patents were considered patentable subject matter. The CAFC perhaps is suggesting that patent applicants, the USPTO, and courts can readily distinguish between "technology" such as "computer technology" and business-process technology such as computing hedging risks and making financial decisions, or controlling the manner in

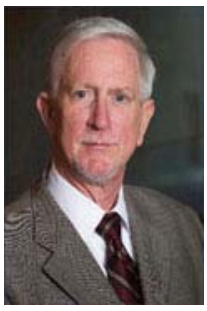
which computers control the presentation of advertisements or handle orders and shipping in a logistics system. It remains to be seen if the courts can truly make these distinctions consistently in the future without some concrete guidance from Congress.

In 1992, the Federal Circuit considered the subject matter patentability of an invention directed to a software-driven monitoring device that analyzed electrocardiographic signals in order to determine certain characteristics of heart function. The computer performed operations transforming a particular input signal to a different output signal that could be visually interpreted, and was found to be patentable subject matter. *Arrhythmia Research Technology, Inc. v. Corazonix Corp*., 958 F.2d 1053 (Fed. Cir. 1992). And in 1994, the Federal Circuit found that the conversion of waveform data representing electrical signals into pixel illumination data for display on an oscilloscope was patentable subject matter. *In re Alappat*, 33 F.3d 1526 (Fed. Cir. 1994). These cases seem to involve similar subject matter as the RCT case – processing data (information signals) and displaying the results of the processing.

For those seeking to obtain or enforce patents directed to software that can be related to "computer technology," the *RCT v. Microsoft* decision may provide some comfort that the *Bilski v. Kappos* decision was not the death knell for all software patents. But for those having inventions for software that is not so readily related to "computer technology" or not as readily satisfying the "machine-or-transformation" test, the decision does not provide much guidance or assurance.

Companies having computer-implemented business processes, software companies, and legal professionals must continue to wait for other cases to consider these complex issues of patentable subject matter. Questions thus remain as to what kinds of "article" will satisfy the article transformation prong of the machine-or-transformation test, or whether further guidance will be provided as to judging abstractness in the context of business method claims or software claims that are not as readily tied to "computer technology."

For more information, please contact:



John R. Harris (Author)
jharris@mmmlaw.com, 404.504.7720

colleague, we welcome you to subscribe to receive more emails of interest from MMM. All past issues are avaliable through our online IP Newsflash Archive.

1600 Atlanta Financial Center - 3343 Peachtree Road, NE - Atlanta GA 30326 - 404.233.7000