ARE Patent Litigation Alert: Federal Circuit Provides Other Limiting Criteria on â€œAbstractâ€• Subject Matter Under Section 101

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Author(s): Charles R. Macedo

On December 8, 2010, the U.S. Court of Appeals for the Federal Circuit issued an Opinion and Order confirming the patent-eligibility of claims directed to methods used in digital half toning technology in *Research Corp. Techs., Inc. v. Microsoft Corp.*, No. 10-1037 (Fed. Cir. Dec. 8, 2010).

The district court in Research Corp. Technologies granted summary judgment of invalidity on the grounds, inter alia, that the claims of two patents in suit were not directed to patent eligible subject matter under 35 U.S.C. § 101. Applying the recent U.S. Supreme Court decision in *Bilski v. Kappos*, 130 S. Ct. 3218, 3225 (2010), the Federal Circuit reversed this decision, and found the claims in question to be patent eligible subject matter.

Significantly, after reviewing the general principles governing the broad scope of patent-eligible subject matter, the Federal Circuit found in pertinent part that the claims at issue were “processes” under 35 U.S.C. § 101:

In this case, the subject matter is a “process” for rendering a halftone image. ***As a process, the subject matter qualifies under both the categorical language of section 101 and the process definition in section 100.***

(Slip. op. at 14 (emphasis added)).

The Federal Circuit then went on to consider whether the claims were subject to one of the three exceptions to patent-eligible subject matter. In this regard, the Federal Circuit explained as follows:

Therefore, this court proceeds to examine the Supreme Court’s three exceptions. The parties do not dispute, and this court agrees, that the inventors do not purport to have invented laws of nature or physical phenomena. Therefore, this court turns to abstractness. Indeed, the Supreme Court in *Bilski* refocused this court’s inquiry into processes on the question of whether the subject matter of the invention is abstract.

(*Id*. at 14).

In discussing whether the claims at issue were “abstract”, the Federal Circuit

responded to the Supreme Court's invitation to develop "other limiting criteria that further the purposes of the Patent Act and are not inconsistent with its text." (*Research Corp. Techs.*, Slip op. at 14, quoting *Bilski*, 130 S.Ct. at 3231). Significantly, in this regard, the Federal Circuit provided the following guidance on what constitute "abstractness" for purposes of a Section 101 analysis:

With that guidance, 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.

(*Id*.)

With respect to the claims at issue, the Federal Circuit provided the following useful analysis:

In that context, this court perceives nothing abstract in the subject matter of the processes claimed in the '310 and '228 patents. The '310 and '228 patents claim methods (statutory "processes") for rendering a halftone image of a digital image by comparing, pixel by pixel, the digital image against a blue noise mask.

The invention presents functional and palpable applications in the field of computer technology. These inventions address "a need in the art for a method of and apparatus for the halftone rendering of gray scale images in which a digital data processor is utilized in a simple and precise manner to accomplish the halftone rendering." '310 patent col.3 ll.33-40. The fact that some claims in the '310 and '228 patents require a "high contrast film," "a film printer," "a memory," and "printer and display devices" also confirm this court's holding that the invention is not abstract. ***Indeed, this court notes 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.***

(Id. at 14-15 (emphasis added)).

The Federal Circuit also provided a useful discussion of the effect of the inclusion of one or more algorithms or formulas in the claim:

This court also observes that the claimed methods incorporate algorithms and formulas that control the masks and halftoning. These algorithms and formulas, even though admittedly a significant part of the claimed combination, do not bring this invention even close to abstractness that would override the statutory categories and context. The Supreme Court has already made abundantly clear that inventions incorporating and relying upon even "a well known mathematical equation" do not lose eligibility because "several steps of the process [use that] mathematical equation." Diehr, 450 U.S. at 185. Indeed, the Supreme Court counseled:

In determining the eligibility of respondents' claimed process for patent protection under section 101, their claims must be considered as a whole. It is inappropriate to dissect the claims into old and new elements and then to ignore the presence of the old elements in the analysis. This is particularly true in a process claim because a new combination of steps may be patentable even though all the constituents of the combination were well known and in common use before the combination was made.

Id. at 188. Borrowing from the reasoning of the Supreme Court in *Diehr*, this court observes that the patentees here "do not seek to patent a mathematical formula. Instead, they seek patent protection for a process of" halftoning in computer applications. *Id*. at 187. Moreover, because the inventions claimed in the '310 and '228 patents are directed to patent-eligible subject matter, the process claims at issue, which claim aspects and applications of the same subject matter, are also patent-eligible.

(*Id*. at 15-16).

Nonetheless, the Federal Circuit provided a caution that merely because a claim is not abstract under a patent-eligibility analysis associated with Section 101, a claim may still be invalid for lack of sufficient concreteness under Section 112 of the patent statute:

In the context of the statute, this court notes that an invention which is not so manifestly abstract as to override the statutory language of section 101 may nonetheless lack sufficient concrete disclosure to warrant a patent. In section 112, the Patent Act provides powerful tools to weed out claims that may present a vague or indefinite disclosure of the invention. Thus, a patent that presents a process sufficient to pass the coarse eligibility filter may nonetheless be invalid as indefinite because the invention would "not provide sufficient particularity and clarity to inform skilled artisans of the bounds of the claim." *Star Scientific., Inc. v. R.J. Reynolds Tobacco Co.*, 537 F.3d 1357, 1371 (Fed. Cir. 2008). That same subject matter might also be so conceptual that the written description does not enable a person of ordinary skill in the art to replicate the process.

(*Id*. at 16-17).

In sum, the Federal Circuit "reverse[d] the district court's summary judgment that the asserted claims of the '310 and '228 patents" do not claim patent-eligible inventions. (*Id*. at 25).

For more information on patent-eligible subject matter, please feel free to contact us.

By Charles R. Macedo and Jessica A. Rasmussen
Amster Rothstein & Ebenstein LLP

* Charles R. Macedo is a partner and Jessica Rasmussen is an associate at Amster, Rothstein & Ebenstein LLP. Their practice specializes in intellectual property issues including litigating patent, trademark and other intellectual property disputes. They may be reached at cmacedo@arelaw.com and jrasmussen@arelaw.com.

Mr. Macedo is also the author of *The Corporate Insider's Guide to U.S. Patent Practice*, published by Oxford University Press in 2009.