Keywords: **35 U.S.C. § 101, patent-eligibility, machine-or-transformation test, computer readable media**

General: **The Board found both a method claim and a computer readable media claim to be non-statutory under 35 U.S.C. § 101 for failing to pass the machine-or-transformation test.**

Ex parte Cornea-Hasegan
No. 2008-4742 (B.P.A.I. Jan. 13, 2009)
Application No. 10/328,572

I. Facts

Appellant filed a patent application (the '572 application) directed to a method for predicting results of floating point mathematical operations and calculating using software or hardware, based on the size of the results. If the results of the operations are tiny, then the results are calculated using software; otherwise, the results are calculated using hardware.

During prosecution, the Examiner rejected claims 1-10 and 18-27 of the '572 application under 35 U.S.C. § 101 for being directed to non-statutory subject matter. Appellant appealed the final rejection to the Board.

Appellant argued that independent claims 1 and 18 are statutory under § 101. Claim 1 is directed to a method of performing mathematical calculations, where software is used for the calculations if the result of a floating point operation is predicted to be tiny. Claim 18 is directed to a "computer readable media including program instructions." A processor executes the program instructions to perform similar operations to those recited in claim 1. In the Appeal Brief, Appellant argued that claim 1 contains subject matter that physically transforms an article to a different state, and that it passes the "useful, concrete and tangible results" test described in *State Street*. Appellant also argued that claim 18 is an article of manufacture and is therefore statutory subject matter. Further, claim 18 claims subject matter that physically transforms an article to a different state, and also passes the "useful, concrete and tangible results" test.

The Examiner's Answer explained that the result generated by the mathematical algorithm is not a tangible result and that "a processor is not physically transformed to a different state or thing merely because it uses software as opposed to floating-point hardware."

II. Issue

Did the Examiner err in rejecting claims 1-10 and 18-27 of the '572 application under § 101?

III. Discussion

No. The Board found that both the method of claim 1 and the computer readable media of claim 18 failed the machine-or-transformation test, and are non-statutory subject matter under § 101.

The Board began by discussing *In re Bilski*, citing that "the machine-or transformation test, properly applied, is the governing test for determining patent eligibility of a process under § 101. *In re Bilski*, 545 F.3d 943 at 956 (Fed. Cir. 2008) (en banc). Furthermore, "the 'useful, concrete and tangible result' inquiry is inadequate" in determining whether a claim is statutory under § 101. *Id.* at 959-60.

The machine-or-transformation test provides that 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." *Id.* at 954; *See also Gottschalk v. Benson*, 409 U.S. 63 (1972) and *In re Comiskey*, 499 F.3d 1365, 1377 (Fed. Cir. 2007).

The Board interpreted the "machine" branch of the test based on *Bilski* and *Comiskey*. The *Bilski* court explained that "the use of a specific machine or transformation of an article must impose meaningful limits on the claim's scope to impart patent-eligibility," and in *Comiskey*, "the mere use of the machine to collect data necessary for application of the mental process may not make the claim patentable subject matter." *Bilski*, 545 F.3d 943 at 961 and *Comiskey*, 499 F.3d 1365 at 1380.

In discussing the "transformation" branch of the test, the Board stated that "claims reciting incidental transformations or extra-solution activity also do not convert an otherwise ineligible claim into an eligible one." *See Diamond v. Diehr*, 450 U.S. 175, at 191-2 (1981). Transformation of an article to a different state or thing, or physical transformations, may be indicative of patentability. See *Bilski*, 545 F.3d 943 at 962-3.

Turning to claim 1 of the '572 application, the Board found that the recitation of a processor in itself "does not tie the process steps to a particular machine" and "does not limit the process steps to any specific machine or apparatus." As claim 1 is not tied to a particular machine or apparatus, the Board found that claim 1 fails the "machine" branch of the test. Further, claim 1 also fails the "transformation" branch because the data, or the results of the floating point number, do not represent physical and tangible objects. Therefore, the Board concluded that claim 1 fails the machine-or-transformation test and is not patent-eligible under § 101.

Turning to claim 18 of the '572 application, the Board, citing *State Street*, stated that the analysis of a "manufacture" claim and a "process" claim is the same under § 101. *State St. Bank & Trust Co. v. Signature Fin. Group*, 149 F.3d 1368 (Fed. Cir. 1998). The recitation of a "computer readable media" does not add any real limitation to the scope of the claim, and is "insufficient to render an otherwise ineligible claim patent eligible." *Bilski*, 545 F.3d 943 at 957. As claim 18 shared the same elements as claim 1 (other than claiming a computer readable media rather than a method), the Board found that claim 18 also fails the machine-or-transformation test and is not patent-eligible under § 101.

IV. Conclusion

The machine-or-transformation test must be applied to determine patent-eligibility of a process under § 101. A claim may be patent-eligible if (1) it is tied to a particular machine or apparatus, or (2) it transforms a particular article into a different state or thing. A claim directed to a computer readable media does not add sufficient limitation to the scope of the claim, and must also pass the machine-or-transformation test for patent-eligibility.