UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
12/576,956	10/09/2009	Hovey Raymond Strong JR.	ARC920080100US1	3221

67232	7590	09/19/2019

CANTOR COLBURN LLP - IBM ARC DIVISION
20 Church Street
22nd Floor
Hartford, CT 06103

EXAMINER
GREGG, MARY M

ART UNIT	PAPER NUMBER
3697	

NOTIFICATION DATE	DELIVERY MODE
09/19/2019	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

usptopatentmail@cantorcolburn.com

UNITED STATES PATENT AND TRADEMARK OFFICE
—————————

BEFORE THE PATENT TRIAL AND APPEAL BOARD
—————————

Ex parte HOVEY RAYMOND STRONG, JR., SEKOU REMY,
and TOBIN JON LEHMAN[1]
—————————

Appeal 2018-004417
Application 12/576,956
Technology Center 3600
—————————

Before ANTON W. FETTING, BIBHU R. MOHANTY, and
BRADLEY B. BAYAT, *Administrative Patent Judges*.

MOHANTY, *Administrative Patent Judge*.

DECISION ON APPEAL

STATEMENT OF THE CASE

The Appellants seek our review under 35 U.S.C. § 134 of the final
rejection of claims 1, 2, 4–7, 9–12, and 14–18 which are all the claims
pending in the application. We have jurisdiction under 35 U.S.C. § 6(b).

SUMMARY OF THE DECISION

We AFFIRM.

THE INVENTION

The Appellants' claimed invention is directed to a system for displaying portfolio risk (Spec., para. 4). Claim 1, reproduced below with the italics added, is representative of the subject matter on appeal.

1.   A method for displaying portfolio risk by a computer, comprising:

     receiving, by the computer, *a time series corresponding to a desirability of each of an asset in a portfolio*, wherein the desirability is a measurable desirability based on at least one of a building cost, a labor turnover, a transportation cost, a raw material cost, an operation cost, or other location specific data;

     receiving, by the computer, *a standard time series corresponding to a weighted average normalized desirability of each of the assets in the portfolio*;

     maintaining, by the computer, *the time series corresponding to the weight and the desirability of each of the assets* in the portfolio;

     maintaining, by the computer, *the standard time series for comparison with the time serie*s corresponding to the desirability of each of the assets in the portfolio;

     displaying, by the computer, *for each asset in the portfolio, a quantity based on desirability versus a quantity* based on the correlation between desirability and the standard time series over two specified windows of time;

     calculating, by the computer, *a trend information, including a strength of the trend information*, based on moving two specified windows of time from the past to the point where at least one window is a most current window, wherein the trend information includes a trend for desirability and a trend for the correlation between desirability and the standard time series over two specified windows of time;

     displaying, by the computer, *the trend information, wherein the trend information includes an arrow having a length and a direction, the length representing the strength of the trend information.*

THE REJECTION

The following rejection is before us for review:

Claims 1, 2, 4–7, 9–12, and 14–18 are rejected under 35 U.S.C. § 101 as being directed to non-statutory subject matter.

FINDINGS OF FACT

We have determined that the findings of fact in the Analysis section below are supported at least by a preponderance of the evidence.[2]

ANALYSIS

Rejection under 35 U.S.C. § 101

The Appellant argues that the rejection of claim 1 is improper because the claim is not directed to an abstract idea (App. Br. 6). The Appellant argues further that the claim is "significantly more" than the alleged abstract idea (App. Br. 6; Reply Br. 2, 3).

In contrast, the Examiner has determined that the rejection of record is proper (Final Action 2–18; Ans. 3–9).

We agree with the Examiner. An invention is patent eligible if it claims a "new and useful process, machine, manufacture, or composition of matter." 35 U.S.C. § 101. However, the Supreme Court has long interpreted 35 U.S.C. § 101 to include implicit exceptions: "[l]aws of nature, natural phenomena, and abstract ideas" are not patentable. *E.g.*, *Alice Corp. v. CLS Bank Int'l*, 573 U.S. 208, 216 (2014).

---

[2] *See Ethicon, Inc. v. Quigg*, 849 F.2d 1422, 1427 (Fed. Cir. 1988) (explaining the general evidentiary standard for proceedings before the Patent Office).

In determining whether a claim falls within an excluded category, we are guided by the Supreme Court's two-step framework, described in *Mayo* and *Alice*. *Id.* at 217–18 (citing *Mayo Collaborative Servs. v. Prometheus Labs., Inc.*, 566 U.S. 66, 75–77 (2012)). In accordance with that framework, we first determine what concept the claim is "directed to." *See Alice*, 573 U.S. at 219 ("On their face, the claims before us are drawn to the concept of intermediated settlement, *i.e.,* the use of a third party to mitigate settlement risk."); *see also Bilski v. Kappos*, 561 U.S. 593, 611 (2010) ("Claims 1 and 4 in petitioners' application explain the basic concept of hedging, or protecting against risk.").

Concepts determined to be abstract ideas, and thus patent ineligible, include certain methods of organizing human activity, such as fundamental economic practices (*Alice*, 573 U.S. at 219–20; *Bilski*, 561 U.S. at 611); mathematical formulas (*Parker v. Flook*, 437 U.S. 584, 594–95 (1978)); and mental processes (*Gottschalk v. Benson*, 409 U.S. 63, 69 (1972)). Concepts determined to be patent eligible include physical and chemical processes, such as "molding rubber products" (*Diamond v. Diehr*, 450 U.S. 175, 191 (1981)); "tanning, dyeing, making water-proof cloth, vulcanizing India rubber, smelting ores" (*id.* at 182 n.7 (quoting *Corning v. Burden*, 56 U.S. 252, 267–68 (1853))); and manufacturing flour (*Benson*, 409 U.S. at 69 (citing *Cochrane v. Deener*, 94 U.S. 780, 785 (1876))).

In *Diehr*, the claim at issue recited a mathematical formula, but the Supreme Court held that "[a] claim drawn to subject matter otherwise statutory does not become nonstatutory simply because it uses a mathematical formula." *Diehr*, 450 U.S. at 176; *see also id.* at 191 ("We view respondents' claims as nothing more than a process for molding rubber

products and not as an attempt to patent a mathematical formula."). Having said that, the Supreme Court also indicated that a claim "seeking patent protection for that formula in the abstract . . . is not accorded the protection of our patent laws, . . . and this principle cannot be circumvented by attempting to limit the use of the formula to a particular technological environment." *Id.* (internal citation omitted) (citing *Benson* and *Flook*); *see, e.g.*, *id.* at 187 ("It is now commonplace that an *application* of a law of nature or mathematical formula to a known structure or process may well be deserving of patent protection.").

The PTO recently published revised guidance on the application of § 101. *2019 Revised Patent Subject Matter Eligibility Guidance*, 84 Fed. Reg. 50 (Jan. 7, 2019) ("Guidance"). Under the Guidance, we first look to whether the claim recites:

> (1) any judicial exceptions, including certain groupings of abstract ideas (i.e., mathematical concepts, certain methods of organizing human activity such as a fundamental economic practice, or mental processes); and

> (2) additional elements that integrate the judicial exception into a practical application (*see* MPEP § 2106.05(a)–(c), (e)–(h)).

Only if a claim (1) recites a judicial exception and (2) does not integrate that exception into a practical application, do we then look to whether the claim:

> (3) adds a specific limitation beyond the judicial exception that is not "well-understood, routine, conventional" in the field (*see* MPEP § 2106.05(d)); or

(4) simply appends well-understood, routine, conventional
activities previously known to the industry, specified at a high
level of generality, to the judicial exception.

See Guidance.

If the claim is "directed to" an abstract idea, we turn to the second
step of the *Alice* and *Mayo* framework, where "we must examine the
elements of the claim to determine whether it contains an '"inventive
concept"' sufficient to 'transform' the claimed abstract idea into a patent-
eligible application." *Alice*, 573 U.S. at 221 (citation omitted). "A claim
that recites an abstract idea must include 'additional features' to ensure 'that
the [claim] is more than a drafting effort designed to monopolize the
[abstract idea].'" *Id.* (alterations in original) (quoting *Mayo*, 566 U.S. at 77).
"[M]erely requir[ing] generic computer implementation[] fail[s] to transform
that abstract idea into a patent-eligible invention." *Id.*

Here, the Examiner has determined that the claim is directed to the
concept of managing portfolios and calculating trends which is a long held
economic practice and mathematical relationship and therefore an abstract
idea (Ans. 4). We substantially agree with the Examiner in this regard as
claim 1 is directed to the steps in italics in the claim above. These steps are
directed to the concept of displaying an asset portfolio risk and trend
information, which is a fundamental economic practice using calculations in
mathematical relationships and directed to an abstract idea. A system, like
the claimed system, "a process that employs mathematical algorithms to
manipulate existing information to generate additional information is not
patent eligible." *See Digitech Image Techs, LLC v. Elecs. for Imaging, Inc.*,
758 F.3d 1344, 1351 (Fed. Cir. 2014). In *Int. Ventures I LLC v. Capital One*

Financial Corp., 850 F.3d 1332, 1340 (Fed. Cir. 2017) it was held that collecting, displaying, and manipulating data was directed to an abstract idea. *See Elec. Power Grp., LLC v. Alstom S.A.*, 830 F.3d 1350 (Fed. Cir. 2016) (collecting information, analyzing it, and displaying results from certain results of the collection and analysis was held to be an abstract idea).

Thus, we consider the claim to be directed to a judicial exception as identified above.

The claims do not improve computer functionality, improve another field of technology, utilize a particular machine, or effect a physical transformation. Rather, we determine that nothing in the claims imposes a meaningful limit on the judicial exception, such that the claims are more than a drafting effort to monopolize the judicial exception.

For example, in claim 1 the steps of [1] "receiving, by the computer, a time series corresponding to a desirability of each of an asset in a portfolio"; [2] "receiving, by the computer, a standard time series corresponding to a weighted average normalized desirability of each of the assets in the portfolio"; [3] "maintaining, by the computer, the time series corresponding to the weight and the desirability of each of the assets"; [4] "maintaining, by the computer, the standard time series for comparison with the time series corresponding to the desirability of each of the assets"; [5] "displaying, by the computer, for each asset in the portfolio, a quantity based on desirability versus a quantity"; [6] "calculating, by the computer, a trend information, including a strength of the trend information"; and [7] "displaying, by the computer, the trend information, wherein the trend information includes an arrow having a length and a direction, the length representing the strength of the trend information," are merely conventional steps performed by a

generic computer that do not improve computer functionality. That is, these recited steps [1]–[7] "do not . . . purport to improve the functioning of the computer itself" (*Alice*, 573 U.S. at 225) but are merely generic functions performed by a conventional processor. Likewise, these same steps [1]–[7] listed above do not improve the technology of the technical field and merely use generic computer components and functions to perform the steps. Also, the recited method steps [1]–[7] above do not require a "particular machine" and can be utilized with a general purpose computer, and the steps performed are purely conventional. In this case the general purpose computer is merely an object on which the method operates in a conventional manner. Further, the claim as a whole fails to effect any particular transformation of an article to a different state. The recited steps [1]–[7] fail to provide meaningful limitations to limit the judicial exception and rather are mere instructions to apply the method to a generic computer.

Considering the elements of the claim both individually and as "an ordered combination" the functions performed by the computer system at each step of the process are purely conventional. Each step of the claimed method does no more than require a generic computer to perform a generic computer function. Thus, the claimed elements have not been shown to integrate the judicial exception into a practical application. *See* Guidance, 84 Fed. Reg. at 54–55. The Revised Guidance references the MANUAL OF PATENT EXAMINING PROCEDURE ("MPEP") §§ 2106.05(a)–(c) and (e)–(h).

Turning to the second step of the *Alice* and *Mayo* framework, we determine that the claim does not contain an inventive concept sufficient to "transform" the abstract nature of the claim into a patent-eligible application.

The claim fails to add a specific limitation beyond the judicial exception that is not well-understood, routine, and conventional in the field. Rather the claim uses well-understood, routine, and conventional activities previously known in the art and they are recited at a high level of generality. The Specification at paragraphs 49–55 for example describes using conventional computer components such as processors, cache, memory, disk drives, and software in a conventional manner. The claim specifically includes recitations for a computer to implement the method but these computer components are all used in a manner that is well-understood, routine, and conventional in the field. The Appellant has not shown these claimed generic computer components which are used to implement the claimed method are not well-understood, routine, or conventional in the field. The Appellant has not demonstrated that the processor described in the Specification at page 12 or the claimed computer for instance are not a general purpose computer components beyond those known to be routine and conventional known to perform similar functions in a well-understood manner. Here, the claim has not been shown to be "significantly more" than the abstract idea.

The Appellant in the Appeal Brief at page 7 has also cited to *McRO, Inc. v. Bandai Namco Games Am. Inc.*, 837 F.3d 1299 (Fed. Cir. 2016), but the claims in that case are distinguished from this case in being directed to rules for lip sync and facial expression animation. For these above reasons, the rejection of claim 1 is sustained. The Appellant has provided the same arguments for the remaining claims which are drawn to similar subject matter and the rejection of these claims is sustained as well for the same reasons given above.

CONCLUSIONS OF LAW

We conclude that Appellants have not shown that the Examiner erred in rejecting claims 1, 2, 4–7, 9–12, and 14–18 under 35 U.S.C. § 101.

DECISION

The Examiner's rejection of claims 1, 2, 4–7, 9–12, and 14–18 is sustained.

No time period for taking any subsequent action in connection with this appeal may be extended under 37 C.F.R. § 1.136(a)(1)(iv). *See* 37 C.F.R. § 41.50(f).

<u>AFFIRMED</u>