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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
14/265,332	04/29/2014	Adam Sheldon	1043-016	4742

88360 7590 01/24/2020		EXAMINER	
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Chicago, IL 60602		ART UNIT	PAPER NUMBER
		3697	

NOTIFICATION DATE	DELIVERY MODE
01/24/2020	ELECTRONIC

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PTOL-90A (Rev. 04/07)

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BEFORE THE PATENT TRIAL AND APPEAL BOARD
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Ex parte ADAM SHELDON
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Appeal 2018-004246
Application 14/265,332
Technology Center 3600
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Before ANTON W. FETTING, BIBHU R. MOHANTY, and
BRUCE T. WIEDER, *Administrative Patent Judges*.

MOHANTY, *Administrative Patent Judge*.

DECISION ON APPEAL

STATEMENT OF THE CASE

Pursuant to 35 U.S.C. § 134(a), Appellant[1] appeals from the
Examiner's decision to reject claims 1–20. We have jurisdiction under
35 U.S.C. § 6(b).

SUMMARY OF THE DECISION

We AFFIRM.

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[1] We use the word Appellant to refer to "applicant" as defined in 37 C.F.R.
§ 1.42(a). Appellant identifies the real party in interest as Bionic Trader
Systems, LLC. Appeal Br. 3.

CLAIMED SUBJECT MATTER

The Appellant's claimed invention relates to a trading system and method that facilitates a "target" trading process (Spec., para. 2). Claim 1, reproduced below with the italics added, is representative of the subject matter on appeal.

> 1.   A method of reaching one or more target positions in a user-directed trading system comprising the steps of:
>   *providing a user interface* that receives one or more user commands through an input device *to identify one or more target positions*, wherein each target position includes a tractable instrument identifier, a target quantity, and an identification of the side of market;
>   *for at least one of the target positions, identifying a corresponding initial position* including a current quantity associated with the tractable instrument identifier and a side of the market, wherein the side of the market of at least one of the target positions is on the opposite side of the market from the side of the market of the corresponding initial position;
>   *in response to receiving a trigger to trade to the one or more identified target positions, triggering the trading system to identify one or more orders required to reach at least one target position* from at least one initial position; and
>   *in response to receiving a single user command to trade to the one or more identified target positions through the user interface, triggering the trading system to execute one or more of the orders identified as being required to reach the at least one target position* from the at least one initial position, including the target position having the identification of the side of the market that is on the opposite side of the market from the side of the market of the corresponding initial position.

THE REJECTION

The following rejection is before us for review:

Claims 1–20 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 (Supp. App. Br. 6–9). The

Appellant argues further that the claim is "significantly more" than the

alleged abstract idea (Supp. App. Br. 10, 11).

In contrast, the Examiner has determined that the rejection of record is

proper (Final Action 2–4; Ans. 2–5).

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).

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*,

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[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).

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, 192 (1981)); "tanning, dyeing, making waterproof cloth, vulcanizing India rubber, smelting ores" (*id.* at 182 n.7 (quoting *Corning v. Burden*, 56 U.S. 252, 267–68 (1854))); 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 187; *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, i.e., evaluate whether the claim
> "appl[ies], rel[ies] on, or use[s] the judicial exception in a manner
> that imposes a meaningful limit on the judicial exception, such
> that the claim is more than a drafting effort designed to
> monopolize the judicial exception." (*see* Guidance, 84 Fed. Reg.
> at 54; *see also* 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.*

The Specification at paragraph 2 states that the invention generally relates to a trading system and method that facilitates a "target" trading process. Here, the Examiner has determined that the claim sets forth the concept of facilitating a target trading process (Ans. 3). We substantially agree with the Examiner. We determine that claim 1 sets forth the subject matter in italics above, which describes the concept executing a target position in a trading system which is a certain method of organizing human activity and fundamental economic practice, i.e., a judicial exception. In *Chicago Board of Options Exchange v. International Securities Exchange*, 640 Fed. Appx. 986 (Mem) (Fed. Cir. 2016), the Federal Circuit affirmed the determination in three cases (CBM2013-00049, CBM2013-00050, CBM2013-00051) involving trading technologies that were held to not meet the requirements of 35 U.S.C. § 101. In *Trading Tech. Int'l, Inc. v. IBG, LLC*, 921 F.3d 1084, 1089 (Fed. Cir. 2019) it was held that claims directed to a financial trading method used by a computer were not patent eligible.

We next determine whether the claim recites additional elements in the claim to integrate the judicial exception into a practical application. *See* Guidance, 84 Fed. Reg. at 54–55. The Revised Guidance references the

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MANUAL OF PATENT EXAMINING PROCEDURE ("MPEP") §§ 2106.05(a)–(c) and (e)–(h).

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

For example, in claim 1 the steps of [1] "providing a user interface . . . to identify one or more target positions," [2] "for at least one of the target positions, identifying a corresponding initial position," [3] "in response to receiving a trigger to trade to the one or more identified target positions, triggering the trading system to identify one or more orders required to reach at least one target position," [4] "in response to receiving a single user command to trade to the one or more identified target positions through the user interface, triggering the trading system to execute one or more of the orders identified as being required to reach the at least one target," are merely steps performed by a generic computer that do not improve computer functionality. That is, these recited steps [1]–[4] "do not purport to improve the functioning of the computer itself" but are merely generic functions performed by a conventional processor. Likewise, these same steps [1]–[4] 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]–[4] above do not require a "particular machine" and can be utilized with a general purpose computer. 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]–[4] 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 as set forth in the Revised Guidance which 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 both individually and as an ordered combination fails to add subject matter 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 75–80 for example describes using conventional computer components such as a PC, CPU, keyboards, readers, servers, and network terminals in a conventional manner. The claim specifically includes recitations for computers 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 demonstrated that the computers described in the Specification at paragraphs 75–80 for instance

are not general purpose computer components 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, at page 6–8 of the Appeal Brief, has also cited to *Enfish, LLC v. Microsoft Corp.*, 822 F.3d 1327 (Fed. Cir. 2016) to show that the claim is not abstract, but the claims in that case were not similar in scope to those here and were in contrast directed to a self-referential data table.

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 for the same reasons given above.

CONCLUSIONS OF LAW

We conclude that Appellants have not shown that the Examiner erred in rejecting claims 1–20 under 35 U.S.C. § 101.

DECISION SUMMARY

In summary:

Claims Rejected	35 U.S.C. §	Reference(s)/Basis	Affirmed	Reversed
1–20	101	Eligibility	1–20	

TIME PERIOD FOR RESPONSE

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

AFFIRMED