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UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

Ex parte HOWARD W. LUTNICK and PHILIP M. GINSBERG

Appeal 2018-009002
Application 14/622,151
Technology Center 3600

Before CAROLYN D. THOMAS, KARA L. SZPONDOWSKI, and
MICHAEL M. BARRY, *Administrative Patent Judges*.

THOMAS, *Administrative Patent Judge*.

DECISION ON APPEAL

Pursuant to 35 U.S.C. § 134(a), Appellant¹ appeals from the Examiner's decision to reject claims 7–11 and 14–18. Claims 1–6 and 13 are withdrawn and claim 12 is canceled. Claim Appendix. We have jurisdiction over the appeal under 35 U.S.C. § 6(b).

We AFFIRM.

¹ We use the word “Appellant” to refer to “applicant” as defined in 37 C.F.R. § 1.42. Appellant identifies the real party in interest as CFPH, LLC. Appeal Br. 3.

The present invention relates generally to trading of financial instruments. *See* Abstr.

Independent claim 7, reproduced below, is representative of the appealed claims:

7. A method comprising:
 - storing, by at least one processor, a plurality of electronic records indicative of bids and offers for a variety of financial instruments in at least one queue in a memory;
 - comparing, by the at least one processor, the bids with the offers stored in the at least one queue;
 - determining, by the at least one processor, whether a bid for a financial instrument stored in the at least one queue matches an offer for the financial instrument stored in the at least one queue;
 - transferring, by the at least one processor and in response to determining the matching bid and offer, data indicative of money from a second account database to a first account database;
 - forming, by the at least one processor and in response to determining the matching bid and offer, a first obligation to make a payment of an amount of money to a user if an outcome of a contest meets a winning parameter;
 - determining, by the at least one processor, that the outcome meets the winning parameter; and
 - transmitting, by the at least one processor and in response to the determining that the outcome meets the winning parameter, a payment of the amount of money to the user.

Appellant appeals the following rejection:

Claims 7–11 and 14–18 are rejected under 35 U.S.C. § 101 because the claimed invention is directed to patent-ineligible subject matter. Final Act. 2–9.

We review the appealed rejections for error based upon the issues identified by Appellant, and in light of the arguments and evidence produced thereon. *Ex parte Frye*, 94 USPQ2d 1072, 1075 (BPAI 2010) (precedential).

ANALYSIS

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 the 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.”). For example, 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)).

The USPTO published revised guidance on the application of 35 U.S.C. § 101. USPTO’s 2019 Revised Patent Subject Matter Eligibility Guidance, 84 Fed. Reg. 50 (Jan. 7, 2019) (“Revised Guidance”). *Updated by USPTO, October 2019 Update: Subject Matter Eligibility* (available at <https://www.uspto.gov/sites/default/files/documents/>

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peg_oct_2019_update.pdf) (jointly referred to as “Revised Guidance”); *see also* October 2019 Patent Eligibility Guidance Update, 84 Fed. Reg. 55942 (Oct. 18, 2019) (notifying the public of the availability of the October update).

Under the Revised Guidance “Step 2A,” the office first looks 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)). 84 Fed. Reg. at 51–52, 55.

Only if a claim (1) recites a judicial exception and (2) does not integrate that exception into a practical application, does the Office then (pursuant to the Revised Guidance “Step 2B”) 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 § 106.05(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. 84 Fed. Reg. at 56.

Step 2A, Prong 1 (Does the Claim Recite a Judicial Exception?)

With respect to independent method claim 7, and similarly, apparatus claim 14, the Examiner determines, and we agree, that the claims are directed to “trading a financial instrument . . . a fundamental economic practice and a method of organizing human activity . . . such as creating and

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fulfilling a contractual relationship” (Final Act. 3), which is a type of abstract idea.

For example, claim 7 recites at least the following limitations: (1) “storing . . . a plurality of electronic records indicative of bids and offers,” (2) “comparing . . . the bids with the offers,” (3) “determining . . . whether a bid . . . matches an offer,” (4) “transferring . . . data indicative of money,” (5) “forming . . . a first obligation to make a payment . . . if an outcome of a contest meets a winning parameter,” (6) “determining . . . that the outcome meets the winning parameters,” and (7) “transmitting . . . a payment.” Claim 14 recites similar limitations. These limitations, under their broadest reasonable interpretation, recite at least commercial or legal interactions, including agreements in the form of contracts or legal obligations and/or sales activities. We agree with the Examiner that “[t]he overall abstract idea of trading a financial instrument is a combination of abstract-idea processes.” Ans. 4. Merely combining abstract ideas does not render the combination any less abstract. *Cf. Shortridge v. Found. Constr. Payroll Serv., LLC*, No. 14-CV-04850-JCS, 2015 WL 1739256 (N.D. Cal. Apr. 14, 2015), *aff’d*, No. 2015-1898, 2016 WL 3742816 (Fed. Cir. July 13, 2016); *see also RecogniCorp LLC v. Nintendo Co. Ltd.*, 855 F.3d 1322, 1327 (Fed. Cir. 2017) (“[a]dding one abstract idea (math) to another abstract idea (encoding and decoding) does not render the claim non-abstract”).

Supporting the Examiner’s interpretation, Appellant’s Specification states:

For example, a first user may submit a bid to purchase a financial instrument to the marketplace. A second user may submit an offer to sell the financial instrument to the marketplace. Any number of bids and offers may be received for any number of financial instruments from any number of

users. The marketplace may match the bids and offers together to form trades between users. Processors and/or queues may be used in some embodiments to manage and track the variety of orders for a variety of financial instruments that may trade through a marketplace.

The electronic marketplace may match bids and offers for a financial instrument in a variety of manners. For example, in some embodiments, a pro-rata filling mode may be used in which one bid or offer may be matched against a plurality of matching offers or bids in a prorated manner. As another example, a first come first serve mode may be used in which an incoming bid or offer is matched against a matching offer or bid that has been pending for a longest amount of time first. Offers and bids may be determined to be matching based on being for a same financial instrument and for a same price or price mechanism. In response to finding matches, a marketplace may communicate with a clearinghouse to facilitate an exchange to fulfil the matching orders. Matching orders may happen in a high speed environment to minimize latency or delay so that accurate pricing and desire matching takes place. This can be accomplished using state of the art computing and/or networking technologies.

Spec. ¶¶ 18–19.

Similarly, at least the following decisions from our reviewing court have found many types of fundamental commercial practices patent ineligible: *OIP Techs., Inc. v. Amazon.com, Inc.*, 788 F.3d 1359 (Fed. Cir. 2015), *cert. denied*, 136 S. Ct. 701 (mem) (2015) (offer-based price optimization); *buySAFE, Inc. v. Google, Inc.*, 765 F.3d 1350 (Fed. Cir. 2014) (transaction guaranty); *Personalized Media Commc'ns, L.L.C. v. Amazon.com Inc.*, 671 F. App'x 777 (mem) (Fed. Cir. 2016) (receiving instructions for ordering).

Firstly, Appellant contends that the “Office Action is not in accordance with the eligibility guidelines” published in 2016. Appeal Br. 8.

However, such guidelines have been superseded by the aforementioned Revised Guidance, which our analysis is following.

Secondly, Appellant contends that the claimed concept “is directed to memory queue operations for matching bids and offers [and] [t]he Examiner has not cited a case reasonably tied to this concept.” Appeal Br. 9. We determine that the Examiner has provided a sufficient response supported by a preponderance of evidence. *See* Final Act. 3–9; Ans. 3–11. Additionally, we supplement the Examiner’s analysis per the Revised Guidance, outlining relevant cases.

Therefore, for at least the aforementioned reasons, we agree with the Examiner that claims 7 and 14 recite an abstract idea, which we conclude is “commercial or legal interactions,” which are certain methods of organizing human activity under the Revised Guidance.

Step 2A—Prong 2 (integration into Practical Application)²

Under the Revised Guidance, we now must determine if additional elements in the claims integrate the judicial exception into a **practical application** (*see* MPEP § 2106.05(a)–(c), (e)–(h)).

We discern no additional element (or combination of elements) recited in Appellant’s claims 7 and 14 that integrate the judicial exception into a practical application. *See* Revised Guidance, 84 Fed. Reg. at 54–55 (“Prong 2”). For example, Appellant’s claimed additional elements (e.g., “processor,” and “memory,”) do not: (1) improve the functioning of a

² We acknowledge that some of the considerations at Step 2A, Prong 2, properly may be evaluated under Step 2 of *Alice* (Step 2B of the Office revised guidance). For purposes of maintaining consistent treatment within the Office, we evaluate them under Step 1 of *Alice* (Step 2A of the Office revised guidance). *See* Revised Guidance, 84 Fed. Reg. at 55 nn.25, 27–32.

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computer or other technology; (2) are not applied with any particular machine (except for a generic computer); (3) do not effect a transformation of a particular article to a different state; and (4) are not applied in any meaningful way beyond generally linking the use of the judicial exception to a particular technological environment, such that the claim as a whole is more than a drafting effort designed to monopolize the exception. *See* MPEP §§ 2106.05(a)–(c), (e)–(h).

Appellant contends “the claimed subject matter recites an improvement to computer technology . . . [because] the claims recite a set of rules that allow the computer to perform a function that was not previously performed by a computer.” Appeal Br. 11.

Relatedly, Appellant’s Specification states:

For example, in the given example of party A and party B trading a futures contract, the clearinghouse may determine that team A wins the game. In response, the clearinghouse may determine that the clearing house owes party A and is owed from party B. The clearinghouse may transfer money from party B to the clearinghouse and from the clearinghouse to party A in response (e.g., by directing a marketplace to make such transfers.). In some embodiments, two transfers may not be used because they are offsetting to one another. Rather, a single transfer from party B to party A may be used.

Spec. ¶ 40. In other words, the alleged rules in the claimed invention allow a business method related to trading financial instruments to consider the outcome of competitions.

In *McRO*, the Federal Circuit concluded that the claim, when considered as a whole, was directed to a “technological improvement over the existing, manual 3-D animation techniques” through the “use of limited rules specifically designed to achieve an improved technological result in conventional industry practice.” *McRO, Inc. v. Bandai Namco Games Am.*

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Inc., 837 F.3d 1299, 1316 (Fed. Cir. 2016). Specifically, the Federal Circuit found that the claimed rules allow computers to produce accurate and realistic lip synchronization and facial expressions in animated characters that previously could only be produced by human animators; and the rules are limiting because they define morph weight sets as a function of phoneme sub-sequences. *Id.* at 1313 (citations omitted).

In contrast, here, Appellant has not identified any analogous technological improvement attributable to the claimed invention. Although allowing trading that relates to the outcome of competitions may improve a business process, it does not achieve an improved technological result. We see no parallel between the limiting rules described in *McRO* and the results-based rules recited in Appellant's claims.

Instead, the claimed rules improve economic tasks, i.e., transmitting payments in a trading environment. That is, here the arguably innovative technique of the appealed claims is inextricably a part of the abstract idea of trading a financial instrument. Moreover, nothing in the claims, understood in light of the Specification, requires anything other than an off-the-shelf, conventional computer used for collecting and processing/analyzing various information/data. Therefore, unlike *McRO*, the claims are directed not to improvement in computer capabilities, but to the results of applying an abstract idea.

Regarding Appellant's contention that "the instant claims do not preempt all ways of matching orders" (Appeal Br. 12), we note that although pre-emption "'might tend to impede innovation more than it would tend to promote it,' thereby thwarting the primary object of the patent laws" (*Alice*, 573 U.S. at 216 (citing *Mayo*, 566 U.S. at 71)), "the absence of complete preemption does not demonstrate patent eligibility" (*Ariosa Diagnostics*,

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Inc. v. Sequenom, Inc., 788 F.3d 1371, 1379 (Fed. Cir. 2015)). Moreover, we agree with the Examiner that because we find the claimed subject matter covers patent-ineligible subject matter, the pre-emption concern is necessarily addressed. *See* Ans. 8. “Where a patent’s claims are deemed only to disclose patent ineligible subject matter under the *Mayo* framework, . . . preemption concerns are fully addressed and made moot.” *Ariosa Diagnostics*, 788 F.3d at 1379.

For at least the reason noted *supra*, we determine that claims 7 and 14 (1) recite a judicial exception and (2) do not integrate that exception into a practical application. Thus, claims 7 and 14 are directed to the aforementioned abstract idea.

Alice/Mayo—Step 2 (Inventive Concept)
Step 2B identified in the Revised Guidance

Turning to the second step of the *Alice* inquiry, we now look to whether claims 7 and 14 contain any “inventive concept” or add anything “significantly more” to transform the abstract concept into a patent-eligible application. *Alice*, 573 U.S. at 216. As recognized by the Revised Guidance, an “inventive concept” under *Alice* step 2 can be evaluated based on whether an additional element or combination of elements:

- (1) adds a specific limitation or combination of limitations that are not well-understood, routine, conventional activity in the field, which is indicative that an inventive concept may be present; or
- (2) simply appends well-understood, routine, conventional activities previously known to the industry, specified at a high level of generality, to the judicial exception, which is indicative that an inventive concept may not be present.

See Revised Guidance, 84 Fed. Reg. at 56; *see also* MPEP § 2106.05(d).

We find no element or combination of elements recited in Appellant’s claims 7 and 14 that contain any “inventive concept” or add anything “significantly more” to transform the abstract concept into a patent-eligible application. Appellant has not adequately explained how claims 7 and 14 are performed such that it is not a routine and conventional function of a generic computer.

Appellant contends “[t]he lack of prior art rejections” indicates patent eligibility. Appeal Br. 13. However, a finding of novelty or non-obviousness does not require the conclusion that the claimed subject matter is patent-eligible. Although the second step in the *Mayo/Alice* framework is termed a search for an “inventive concept,” the analysis is not an evaluation of novelty or nonobviousness, but, rather, is a search for “an element or combination of elements that is ‘sufficient to ensure that the patent in practice amounts to significantly more than a patent upon the [ineligible concept] itself.’” *Alice*, 573 U.S. at 216. “Groundbreaking, innovative, or even brilliant discovery does not by itself satisfy the § 101 inquiry.” *Ass’n. for Molecular Pathology v. Myriad Genetics, Inc.*, 569 U.S. 576, 591 (2013). A novel and non-obvious claim directed to a purely abstract idea is, nonetheless, patent-ineligible. *See Mayo*, 566 U.S. at 90. *See also Diamond v. Diehr*, 450 U.S. 175, 188–89 (1981) (“The ‘novelty’ of any element or steps in a process, or even of the process itself, is of no relevance in determining whether the subject matter of a claim falls within the § 101 categories of possibly patentable subject matter.”).

Because Appellant’s independent claims 7 and 14 are directed to a patent-ineligible abstract concept, do not include additional elements that integrate the judicial exception into a practical application, and do not add a specific limitation beyond the judicial exception that is not “well-

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understood, routine, and conventional,” we sustain the Examiner’s rejection of the claims 7–11 and 14–18 under 35 U.S.C. § 101 as being directed to non-statutory subject matter in light of *Alice*, its progeny, and the Revised Guidance. Appellant has not separately argued the dependent claims. *See* Appeal Br. 14.

CONCLUSION

In summary:

Claims Rejected	35 U.S.C. §	Reference(s)/Basis	Affirmed	Reversed
7–11, 14–18	101	Eligibility	7–11, 14–18	

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

AFFIRMED