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UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

Ex parte KAMAL JAIN

Appeal 2018-003881
Application 12/820,323
Technology Center 3600

Before JOHN A. EVANS, JASON J. CHUNG, and SCOTT E. BAIN,
Administrative Patent Judges.

CHUNG, *Administrative Patent Judge.*

DECISION ON APPEAL

Pursuant to 35 U.S.C. § 134(a), Appellant¹ appeals the Non-Final Rejection of claims 1–6, 8–13, 15–18, 22, and 25–27.² We have jurisdiction under 35 U.S.C. § 6(b).

We affirm.

INVENTION

The invention relates to a commercial transaction. Abstract. Claim 1 is illustrative of the invention and is reproduced below:

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

² Claims 7, 14, 19 – 21, 23, and 24 are cancelled. Appeal Br. 59–62.

1. A method of fulfilling a query of a user of a user device comprising a display, the method involving a server having a processor and comprising:
executing, on the processor, instructions that cause the server to:
for respective agents of an agent set:
estimate a response probability of the agent to the query; and
receive from the agent a response cost incurred by the agent to generate a response to the query;
select the agents of the agent set that present:
highest response probabilities to the query among the agents of the agent set, and
lowest response costs of responding to the query among the agents of the agent set,
as a responder set of responders to the query, and limiting the responder set by a target responder count;
transmit the query to the responders of the responder set;
send, to the user device, instructions that, when executed by the user device, cause the user device to present, on the display, a visual response interface of responses of the responders to the query; and
upon receiving, from a responder, a response that fulfills the query of the user, send, to the user device, instructions that, when executed by the user device, cause the user device to display the response from the responder within the visual response interface presented on the display.

Appeal Br. 57 (Claims Appendix) (emphases added).

REJECTION

Claims 1–6, 8–13, 15–18, 22, 25–27 stand rejected under 35 U.S.C. § 101 as being directed to patent ineligible subject matter. Non-Final Act. 14–22.

ANALYSIS

I. Claims 1–6, 8–13, 15–18, 22, 25–27 Rejected Under 35 U.S.C. § 101

A. Principles of Law

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 U.S. 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 Court’s two-part 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, 67 (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 waterproof 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 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 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.* (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.”).

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 (quotation marks 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.*

B. USPTO Section 101 Guidance

In January 2019, the U.S. Patent and Trademark Office (USPTO) published revised guidance on the application of § 101. 2019 Revised Patent Subject Matter Eligibility Guidance, 84 Fed. Reg. 50 (Jan. 7, 2019) (“2019 Revised Guidance”).³ “All USPTO personnel are, as a matter of internal agency management, expected to follow the guidance.” *Id.* at 51; *see also* October 2019 Update at 1.

Under the 2019 Revised Guidance and the October 2019 Update, 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) (“Step 2A, Prong One”); and
- (2) additional elements that integrate the judicial exception into a practical application (*see* MPEP § 2106.05(a)–(c), (e)–(h) (9th ed. Rev. 08.2017, Jan. 2018)) (“Step 2A, Prong Two”).⁴

³ In response to received public comments, the Office issued further guidance on October 17, 2019, clarifying the 2019 Revised Guidance. USPTO, *October 2019 Update: Subject Matter Eligibility* (the “October 2019 Update”) (available at https://www.uspto.gov/sites/default/files/documents/peg_oct_2019_update.pdf).

⁴ This evaluation is performed by (a) identifying whether there are any additional elements recited in the claim beyond the judicial exception, and (b) evaluating those additional elements individually and in combination to determine whether the claim as a whole integrates the exception into a

2019 Revised Guidance, 84 Fed. Reg. at 52–55.

Only if a claim (1) recites a judicial exception and (2) does not integrate that exception into a practical application, do we then look, under Step 2B, 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.

2019 Revised Guidance, 84 Fed. Reg. at 52–56.

C. The Examiner’s Conclusions and Appellant’s Arguments

The Examiner concludes the present claims recite certain methods of organizing human activity. Non-Final Act. 11, 13; Ans. 4–5, 13. The Examiner also determines the present claims do not amount to significantly more than an abstract idea itself because the abstract idea is implemented on additional elements that are well-understood, routine, and conventional.

Non-Final Act. 6–7, 18–19 (citing Spec. ¶ 53, Fig. 8; *Ultramercial, Inc. v. Hulu, LLC*, 772 F.3d 709, 716–17 (Fed. Cir. 2014); *buySAFE, Inc. v. Google, Inc.*, 765 F.3d 1350, 1355 (Fed. Cir. 2014)); Ans. 6–8.

Appellant argues the present claims recite an improvement in computer-related technology. Appeal Br. 52–54 (citing *McRO, Inc. v. Bandai Namco Games America Inc.*, 837 F.3d 1299, 1308–14 (Fed. Cir. 2016); Spec. ¶¶ 45–46); Reply Br. 9–11 (citing *Core Wireless Licensing*

practical application. *See* 2019 Revised Guidance - Section III(A)(2), 84 Fed. Reg. 54–55.

S.A.R.L. v. LG Electronics, Inc., 880 F.3d 1356 (Fed. Cir. 2018)). Appellant argues the present claims are necessarily rooted in computer technology to solve problems specifically arising in that realm. Appeal Br. 35–40 (citing *DDR Holdings, LLC v. Hotels.com, L.P.*, 773 F.3d 1245 (Fed. Cir. 2014)); Reply Br. 9–11. Appellant argues the present claims do not preempt any abstract idea. Appeal Br. 37. We disagree with Appellant.

D. Discussion

1. Step 2A, Prong 1

Patent eligibility under 35 U.S.C. § 101 is a question of law that is reviewable *de novo*. See *Dealertrack, Inc. v. Huber*, 674 F.3d 1315, 1333 (Fed. Cir. 2012). We, therefore, conclude the emphasized portions of claim 1,⁵ reproduced above (*see supra* at 2), recite managing personal behavior or relationships or interactions between people (including social activities) because claim 1 requires interactions between two people (i.e., a user and an agent). That is, the present claims recite managing personal behavior or relationships or interactions between people (including social activities) because they require the user to send a query pertaining to a product and an agent is chosen to answer the user’s query based on response probability and cost. According to the Memorandum, managing personal behavior or relationships or interactions between people (including social activities) fall

⁵ Claim 1, reproduced above with emphases, recites similar features as independent claims 25 and 26. Appellant does not argue claims 2–6, 8–13, 15–18, 22, and 25–27 separately with particularity, but asserts the § 101 rejection of those claims should be withdrawn for at least the same reasons as argued for independent claim 1. Appeal Br. 31–56. We, therefore, group claims 1–6, 8–13, 15–18, 22, and 25–27 together and refer to those claims as the “present claims.”

into the category of certain methods of organizing human activity. *See* Memorandum, 84 Fed. Reg. at 52. Moreover, those certain methods of organizing human activity are a type of abstract idea. *See id.*

Because the present claims recite managing personal behavior or relationships or interactions between people (including social activities), which fall into the category of certain methods of organizing human activity (i.e., an abstract idea), we proceed to prong 2.

2. *Step 2A, Prong 2*

The additional elements of the present claims do not integrate the abstract idea into a practical application because they do not impose any meaningful limits on practicing the abstract idea for the following reasons. We disagree with Appellant’s argument that the present claims recite an improvement in computer-related technology. Appeal Br. 52–54 (citing *McRO, Inc. v. Bandai Namco Games Am. Inc.*, 837 F.3d 1299, 1308–14 (Fed. Cir. 2016); Spec. ¶¶ 45–46); Reply Br. 9–11.

Appellant does not identify persuasively how the Specification sets forth an improvement in technology. The USPTO October 2019 Patent Eligibility Guidance Update (“Update”) addresses how we consider evidence of improvement that is presented to us. The Update states:

[d]uring examination, the examiner should analyze the “improvements” consideration by evaluating the specification and the claims to ensure that a technical explanation of the asserted improvement is present in the specification, and that the claim reflects the asserted improvement. Generally, examiners are not expected to make a qualitative judgment on the merits of the asserted improvement. *If the examiner concludes the disclosed invention does not improve technology, the burden shifts to applicant to provide persuasive arguments supported by any necessary evidence to demonstrate that one of ordinary skill*

in the art would understand that the disclosed invention improves technology. Any such evidence submitted under 37 C.F.R. § 1.132 must establish what the specification would convey to one of ordinary skill in the art and cannot be used to supplement the specification. For example, in response to a rejection under 35 U.S.C. § 101, an applicant could submit a declaration under § 1.132 providing testimony on how one of ordinary skill in the art would interpret the disclosed invention as improving technology and the underlying factual basis for that conclusion.

Update, 13 (emphasis added).

In this case, the Examiner concludes the present claims do not recite an improvement to technology. Non-Final Act. 8–9, 11–12, 14, 20; Ans. 9, 13–14, 16. Consequently, we focus on any evidence Appellant cites, as directed in the Update. Here, although Appellant merely identifies paragraphs 45–46 of the Specification, those paragraphs describe lowering response times for agents responding to a user’s query (i.e., certain methods of organizing human activity), which fall within the category of an abstract idea as discussed *supra*, not an improvement to technology. Appeal Br. 52–54 (citing Spec. ¶¶ 45–46); Reply Br. 9–11. Paragraphs 45–46 of the Specification are unlike the technological improvements in *McRO*.

The subject claims considered by the *McRO* court concerned a method for automatically animating lip synchronization and facial expressions. *McRO*, 837 F.3d at 1303. The *McRO* court concluded the subject claims did not recite an abstract idea because the computer animation improved the prior art through the use of rules, rather than artists, to set morph weights and transitions between phonemes. *Id.* at 1308. Thus, the claimed invention in *McRO* allowed for computer performance of animation steps that previously had to be performed by human animators. *Id.* at 1313. The subject claims in *McRO* used “limited rules in a process specifically

designed to achieve an improved technological result” over “existing, manual 3-D animation techniques.” *Id.* at 1316, 1314. Unlike the claims of *McRO*, the present claims do not recite rules for lip sync and facial expression animation or an improvement in computer technology.

We also disagree with Appellant’s argument that the present claims recite an improvement in computer-related technology. Reply Br. 9–11 (citing *Core Wireless Licensing S.A.R.L. v. LG Electronics, Inc.*, 880 F.3d 1356 (Fed. Cir. 2018)). In *Core Wireless*, the court noted that the invention improved the efficiency of using an electronic device by consolidating “‘a limited list of common functions and commonly accessed stored data,’ which can be accessed directly from the main menu.” *Core Wireless*, 880 F.3d at 1363. Moreover, displaying selected data or functions of interest in the summary window allowed the user to view the most pertinent data or functions “‘without actually opening the application window up.’” *Id.* at 1367 (emphasis omitted). As a result, the user’s navigation speed through various views and windows is improved because it saves the user from having to navigate to the required application, opening the application, and then navigating within that application to enable the data of interest to be seen or a function of interest to be activated. *Id.* Unlike the claims of *Core Wireless*, the present claims do not recite a graphical user interface for mobile devices that displays commonly accessed data on a main menu or an improvement in the functioning of computers.

Instead, the present claims recite an abstract idea as discussed *supra*, in § I.D.1. or at best, improving an abstract idea—not a technological improvement. The Specification indicates the additional elements (i.e.,

“processor,”⁶ “server,”⁷ “user device,” “display,” “visual response interface,” and “agent device”⁸) recited in the present claims are merely generic computer components used to implement the abstract idea. Spec. ¶¶ 24, 27, 51, 53. Further, the generic computer components, individually or in combination, do not integrate the judicial exception into a practical application.

Additionally, “a claim for a *new* abstract idea is still an abstract idea.” *Synopsys, Inc. v. Mentor Graphics Corp.*, 839 F.3d 1138, 1151 (Fed. Cir. 2016). “[U]nder the *Mayo/Alice* framework, a claim directed to a newly discovered law of nature (or natural phenomenon or abstract idea) cannot rely on the novelty of that discovery for the inventive concept necessary for patent eligibility” *Genetic Techs. Ltd. v. Merial L.L.C.*, 818 F.3d 1369, 1376 (Fed. Cir. 2016) (citations omitted).

Appellant also argues that the present claims necessarily are rooted in computer technology to solve problems specifically arising in that realm, similar to the claim in *DDR*. Appeal Br. 35–40. We disagree. The subject claim considered by the *DDR* court pertained to a visitor of a host’s website clicking on an advertisement for a third-party product displayed on the host’s website, the visitor is no longer being transported to the third party’s website. *DDR*, 773 F.3d at 1257. In *DDR*, instead of losing visitors to the third-party’s website, the host website can send its visitors to a web page on an outsource provider’s server that (1) incorporates “look and feel” elements from the host website and (2) provides visitors with the opportunity to

⁶ This feature is recited in claims 1 and 26, but not recited in claim 25.

⁷ This feature is recited in claims 1 and 26, but not recited in claim 25.

⁸ This feature is recited in claim 26, but not recited in claims 1 and 25.

purchase products from the third-party merchant without actually entering that merchant's website. *Id.* at 1257–58. In contrast to the claims of *DDR*, the present claims do not recite incorporating “look and feel elements” from a host website and providing visitors with the opportunity to purchase products from a third-party merchant without actually entering the merchant's website.

Appellant's argument that the present claims do not preempt any abstract idea does not persuade us that the claims are eligible. Appeal Br. 37. Although preemption may denote patent ineligibility, its absence does not demonstrate patent eligibility. *See FairWarning, IP, LLC v. Iatric Sys., Inc.*, 839 F.3d at 1098. For claims covering a patent-ineligible concept, preemption concerns “are fully addressed and made moot” by an analysis under the *Mayo/Alice* framework. *Ariosa Diagnostics, Inc. v. Sequenom, Inc.*, 788 F.3d 1371, 1379 (Fed. Cir. 2015).

Appellant does not make any other arguments pertaining to step 2A, prong 2. Because the present claims recite an abstract idea that is not integrated into a practical application, we proceed to Step 2B.

3. Step 2B

We agree with the Examiner's determination that the abstract idea is implemented with additional elements that are well-understood, routine, and conventional. Non-Final Act. 6–7, 18–19 (citing Spec. ¶ 53, Fig. 8; *Ultramercial*, 772 F.3d at 716–17; *buySAFE*, 765 F.3d at 1355); Ans. 6–8. The Specification also supports the Examiner's determination in this regard because it explains that “processor,” “server,” “user device,” “display,” “visual response interface,” and “agent device” are generic components. Spec. ¶¶ 24, 27, 51, 53. Appellant's Specification indicates these additional

elements were well-understood, routine, and conventional components because it describes them at a high level of generality and in a manner that indicates that they are sufficiently well-known. *Id.* Moreover, the additional elements recited in the present claims, analyzed individually or in combination, do not result in the claim, as a whole, amounting to significantly more than the judicial exception.

In addition, the present claims recite an abstract idea using additional elements that are generic computer components as discussed *supra*, in §§ I.D.1. and I.D.2. or at best, improving an abstract idea—not an inventive concept for the reasons discussed in § I.C.2. Accordingly, Appellant’s assertion fails to identify error in the Examiner’s findings.

Appellant does not argue claims 2–6, 8–13, 15–18, 22, and 25–27 separately with particularity, but asserts the § 101 rejection of those claims should be withdrawn for at least the same reasons as argued for independent claim 1. Appeal Br. 31–56. Accordingly, we sustain the Examiner’s rejection of (1) independent claims 1, 25, and 26; and (2) dependent claims 2–6, 8–13, 15–18, 22, and 27 under 35 U.S.C. § 101.

We have only considered those arguments that Appellant actually raised in the Briefs. Arguments Appellant could have made, but chose not to make, in the Briefs have not been considered and are deemed to be waived. *See* 37 C.F.R. § 41.37(c)(1)(iv).

CONCLUSION

Claim(s) Rejected	35 U.S.C. §	Reference(s)/Basis	Affirmed	Reversed
1-6, 8-13, 15-18, 22, 25-27	101	Eligibility	1-6, 8-13, 15-18, 22, 25-27	

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. § 1.136(a)(1)(iv).

AFFIRMED