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UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

Ex parte DEAN P. ALDERUCCI, CHARLES PLOTT,
and MARK MILLER

Appeal 2018-008770
Application 13/600,589
Technology Center 3700

Before JAMES P. CALVE, BRETT C. MARTIN, and LISA M. GUIJT,
Administrative Patent Judges.

GUIJT, *Administrative Patent Judge.*

DECISION ON APPEAL
STATEMENT OF THE CASE

Appellants¹ appeal under 35 U.S.C. § 134(a) from the Examiner's rejection of claims 29–40, 47–50, and 53.² We have jurisdiction under 35 U.S.C. § 6(b).

We AFFIRM.

¹ CFPH, LLC is identified as the real party in interest. Appeal Br. 3.

² Appeal is taken from the Final Office Action dated August 31, 2017.

CLAIMED SUBJECT MATTER

Claims 29, 47, and 53 are the independent claims on appeal. Claim 47, reproduced below, is exemplary of the subject matter on appeal.

47. A machine implemented method, comprising:

providing, by at least one processor of at least one computer in electronic communication with at least one other computer via an electronic communication network, first electronic data comprising first information about a set of possible outcomes of an event to users, wherein at least a part of the first information identifies a characteristic of an actually occurring outcome of the set of possible outcomes;

causing, by the at least one processor, indicia associated with the set of possible outcomes to be displayed at a graphical user interface of an electronic display device of the first remote computer³ of a first user;

causing, by the at least one processor, graphical images associated with the set of possible outcomes to be displayed at a graphical user interface of an electronic display device of a second remote computer of a second user;

after providing the first information, receiving, by the at least one processor, electronic information about at least one wager from the first remote computer via the electronic communications network;

after providing the first information, receiving, by the at least one processor, electronic information about at least one wager from the second remote computer via the electronic communications network;

determining, by the at least one processor, a first set of likelihood values corresponding to the set of possible outcomes using first wagers⁴ placed by the users following provision of the first information, wherein each likelihood value of the first set of likelihood values corresponds to a respective possible outcome of the set of possible outcomes;

³ The claim term “the first remote computer” lacks antecedent basis.

⁴ The claim term “the first wagers” lacks antecedent basis.

determining, by the at least one processor, at least one second likelihood value responsively to comparing the first set of likelihood values to one or more predetermined values, the one or more predetermined values being derived from data regarding expected biases of the users; and

providing, by the at least one processor, second electronic data comprising the at least one second likelihood values to at least one computer of at least one user of the users.

THE REJECTIONS

Claims 29–40, 47–50, and 53 stand rejected under 35 U.S.C. § 101 as directed to patent ineligible subject matter.

Claims 29–40, 47–50, and 53 stand rejected on the grounds of non-statutory double patenting as unpatentable over: (i) claims 1–78 of U.S. Patent No. 7,942,734; (ii) claims 1–33 of U.S. Patent No. 8,070,595; and (iii) claims 1–21 of U.S. Patent No. 8,257,165.

ANALYSIS

35 U.S.C. § 101

Appellants argue claims 29–40, 47–50, and 53 as a group. Appeal Br. 7–9. We select claim 47 as representative, and claims 29–40, 48–50, and 53 stand or fall with claim 47. *See* 37 C.F.R. § 41.37(c)(1)(iv) (2015).

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*, 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.* (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 (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.* (quoting *Mayo*, 566 U.S. at 77 (alterations in original)). “[M]erely requir[ing] generic computer implementation[] fail[s] to transform that abstract idea into a patent-eligible invention.” *Id.*

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) (“2019 Guidance”).⁵ Under that guidance, we first

⁵ Although the Examiner issued the rejection before the 2019 Guidance was published, because the document provides the PTO’s guidance for evaluating subject matter eligibility under existing law, the methodology set

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* 2019 Guidance.

Step One: Does Claim 47 Fall within a Statutory Category of § 101?

Claim 47 recites a method and, thus, falls within the statutory categories of 35 U.S.C. § 101.

Step 2A, Prong One: Does Claim 47 Recite a Judicial Exception?

The Examiner determines that claim 47 recites “a wagering game method,” which is a judicial exception, namely, a mental process that “may be done by hand with pen and paper.” Ans. 2; *see also* Final Act. 3. The Examiner also determines that claim 47 recites steps for “providing data about possible outcomes, receiving wagering information from players, determining likelihood values for the set of outcomes and performing some

forth in the 2019 Guidance applies to examinations of all pending claims, including those at issue in this Appeal.

action based on the likelihood values,” which is similar to “other ‘fundamental economic practice[s] found abstract by the Supreme Court. Final Act. 2–3 (citing, *e.g.*, *In re Smith*, 815 F.3d 816 (Fed. Cir. 2016). *In re Smith*, a precedential decision, held that claims directed to rules for conducting a wagering game are comparable to fundamental economic practices held to be abstract by the Supreme Court. *Smith*, 815 F.3d at 818. In *Smith*, the court held that claims directed to a “method of conducting a wagering game” are drawn to an abstract idea much like the method of exchanging financial obligations in *Alice* and the method of hedging risk in *Bilski v. Kappos*, 561 U.S. 593, 611 (2010). *Id.* at 819. The Examiner further determines that “the additional [claim] elements of . . . [a] processor, [computing devices], and a display device to carry out the abstract method of the game” are “generic computer elements,” which fail “to ‘transform’ the claimed subject matter into a patent-eligible application of the abstract idea.” Final Act. 3–4.

Appellants argue that the Examiner fails to state a *prima facie* case because “the Examiner relies on a position that individual limitations could be performed by a general purpose computing device.”⁶ Appeal Br. 8.

We are not persuaded by Appellants’ argument. The Examiner states a *prima facie* case that claim 47 recites a judicial exception by determining that claim 47 recites a wagering game method, which is a mental process, regardless of the Examiner’s further determination (discussed *infra*) that the

⁶ Although Appellants filed a Reply Brief, Appellants rely solely on the arguments as presented in the Appeal Brief. *See* Reply Br. 2 (“[Appellants] maintain all relevant arguments presented in the Appeal Brief.”).

generic computing components recited in claim 47 simply *apply* the abstract idea.

We agree with the Examiner’s determination that claim 47 recites an abstract mental process that “may be done by hand with pen and paper.” Ans. 2. Specifically, claim 47 recites, as set forth *supra*, in relevant part, the step of “providing . . . first . . . data comprising first information about a set of possible outcomes of an event to users, wherein at least a part of the first information identifies a characteristic of an actually occurring outcome of the set of possible outcomes.” The Specification discloses that “an event can have one or more possible outcomes,” wherein “a possible outcome may include an outcome that may occur” (Spec. 72:28–29); for example, “in a horse race with only one winner (no ties allowed), the possible outcomes ‘horse A wins’ and ‘horse B wins’ are mutually exclusive if horse A and horse B are not the same horse” (*id.* at 72:30–73:1). The Specification also discloses that “[a] characteristic of a true outcome may include a fact relating to a true outcome, a likelihood value relating to a true outcome, or even a true outcome itself” (*id.* at 74:24–26); for example, when the event is a horse race, “a characteristic of a true outcome may include what, e.g., the . . . age of a winning or losing horse . . . is, is not, will be, or will not be . . . or is likely to be, is not likely to be, is likely to not be, or is not likely to not be” (*id.* at 75:14–15). We agree with the Examiner that the provision of data, without more, is a mental process, which can be accomplished in the human mind or by pen and paper via observation, evaluation, judgment, and opinion. *See* Revised Guidance, 84 Fed. Reg. at 52.

Claim 47 also recites, as set forth *supra*, in relevant part, the steps of “causing . . . indicia associated with the set of possible outcomes to be

displayed . . . [to] a first user” and “causing . . . graphical images associated with the set of possible outcomes to be displayed . . . to a second user.” We agree with the Examiner that causing indicia and graphical images associated with the set of possible outcomes to be displayed to first and second users are also mental processes, which can be accomplished in the human mind or by pen and paper.

Claim 47 further recites, as set forth *supra*, in relevant part, the steps of “after providing the first information, receiving . . . information about at least one wager from the first [user]” and “after providing the first information, receiving . . . information about at least one wager from the second [user].” We agree with the Examiner that the receipt of information from users is a mental process, which can be accomplished in the human mind or by pen and paper.

Claim 47 further recites, as set forth *supra*, in relevant part, the steps of “determining . . . a first set of likelihood values corresponding to the set of possible outcomes using first wagers placed by the users following provision of the first information, wherein each likelihood value of the first set of likelihood values corresponds to a respective possible outcome of the set of possible outcomes” and “determining . . . at least one second likelihood value responsively to comparing the first set of likelihood values to one or more predetermined values, the one or more predetermined values being derived from data regarding expected biases of the users.” The Specification discloses that “[e]xamples of biases include, e.g., a bias toward undervaluing very likely outcomes, or a bias toward overvaluing very unlikely outcomes” (Spec. 89:19–20) and that “[s]ome biases may be, e.g., well-known and documented in psychological and scientific literature” (*id.*

at 89:31–32), or “based on at least some historical experience” (*id.* at 90:9). We agree with the Examiner that making such determinations are mental processes, which can be accomplished in the human mind or by pen and paper.

Finally, claim 47 recites, as set forth *supra*, in relevant part, the step of “providing . . . second . . . data comprising the at least one second likelihood values to . . . at least one user of the users.” We agree with the Examiner that the step of providing data is a mental process, which can be accomplished in the human mind or by pen and paper.

In sum, claim 47 recites a series of steps that can be performed in the human mind, or by a human using pen and paper, and without more, are mental processes, or abstract ideas. *CyberSource Corp. v. Retail Decisions, Inc.*, 654 F.3d 1366, 1372 (Fed. Cir. 2011) (holding a method for verifying the validity of a credit card transaction over the Internet as an abstract idea capable of being performed in the human mind or by a human using pen and paper); *see also id.* at 1375 (“That purely mental processes can be unpatentable, even when performed by a computer, was precisely the holding of the Supreme Court in *Gottschalk v. Benson.*”). “Courts have examined claims that required the use of a computer and still found that the underlying, patent-ineligible invention could be performed via pen and paper or in a person’s mind.” *Versata Dev. Grp. v. SAP Am., Inc.*, 793 F.3d 1306, 1335 (Fed. Cir. 2015); *see also* Revised Guidance, 84 Fed. Reg. at 52 n.14 (“If a claim, under its broadest reasonable interpretation, covers performance in the mind but for the recitation of generic computer components, then it is still in the mental processes category unless the claim cannot practically be performed in the mind.”).

To the extent claim 47 recites rules for playing a wagering game, for example, by “receiving . . . information about at least one wager” from first and second users, we determine that such rules are mental processes, and additionally, a certain method of organizing human activity (i.e., a fundamental economic principle), which, similar to the rules for playing physical cards in *In re Smith*, is an abstract idea. *See In re Smith*, 815 F.3d 816 (Fed. Cir. 2016) (determining that rules for playing physical cards are abstract ideas); *see also Planet Bingo, LLC v. VKGS LLC*, 576 Fed. Appx. 1005, 1007–08 (Fed. Cir. 2014) (determining that methods of managing a bingo game are abstract ideas); *see also* Revised Guidance, 84 Fed. Reg. at 52 n.13 (citing *Smith*’s holding that rules for conducting a wagering game are abstract in the certain methods of organizing human activity category).

Step 2A, Prong Two: Is There Integration into a Practical Application?

Following our Office guidance, having found that claim 47 recites judicial exceptions, for example, a mental process, we are instructed next to determine whether the claim recites “additional elements that integrate the exception into a practical application” (*see* MPEP §§ 2106.05(a)–(c), (e)–(h)). *See* Revised Guidance, 84 Fed. Reg. at 54.

We agree with the Examiner that the steps of claim 47 *supra* performed “by the at least one processor”—which are *in addition to* the claim recitations of an abstract idea (either a mental process or a method of organizing human activity discussed *supra*), simply automate actions that can be performed by humans, including in their minds or on pen and paper. Final Act. 3–4 (determining that the claims “require the additional elements of a machine, at least one processor, a second computer, and a display

device to carry out the abstract method of the game,” which are “generic computer elements that merely provide normal computer functions of sending and receiving data and displaying the data to users”). The invocation of a generic processor is also insufficient to transform the abstract ideas into a patent-eligible application. *See, e.g., Elec. Power Grp., LLC v. Alstom S.A.*, 830 F.3d 1350, 1355 (Fed. Cir. 2016) (“[T]he claims’ invocation of computers, networks, and displays does not transform the claimed subject matter into patent-eligible applications. The claims at issue do not require any nonconventional computer, network, or display components, or even a ‘non-conventional and non-generic arrangement of known, conventional pieces,’ but merely call for performance of the claimed information collection, analysis, and display functions ‘on a set of generic computer components’ and display devices. *Bascom [Global Internet Servs., Inc. v. AT&T Mobility, LLC]*, 827 F.3d [1341,] 1349–52 [Fed. Cir. 2016].”).

Claim 47 also recites “at least one computer in electronic communication with at least one other computer via an electronic communication network,” and “graphical user interface[s]” of “electronic display device[s]” of “first [and second] remote computer[s],” which we agree with the Examiner are also implementations of *generic* computing devices to automate the mental steps of claim 47.

Our determination is supported by the Specification, which discloses, for example, that

[i]t will be readily apparent to one of ordinary skill in the art that the various processes described herein may be implemented by, e.g., appropriately programmed general purposed computers, special purpose computers and computing devices. Typically a

processor (e.g., one or more microprocessors, one or more microcontrollers, one or more digital signal processors) will receive instructions (e.g., from a memory or like device), and execute those instructions, thereby performing one or more processes defined by those instructions. Instructions may be embodied in, e.g., one or more computer programs, one or more scripts.

Spec. 10:17–24. Of course, computing components operate generically using *electronic* data, as claimed.

Appellants also argue that “any issues of abstract ideas should be moot given the absence of prior art rejections under §§ 102 and 103,” because “the novelty and non-obviousness of the claims clearly demonstrate that the claimed subject matter recites ‘significantly more’ and is an ‘inventive concept.’” Appeal Br. 8.

Again, we do not find Appellants’ argument persuasive. 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.”).

Accordingly, the recitation of the processor and additional computing components for performing the various steps of claim 47 does not integrate the abstract idea into a practical application because these limitations do not impose any meaningful limits on practicing the abstract ideas. In other words, the recitation of generic computing components is insufficient to integrate the claimed wagering game method into a practical application, and

thus, we determine that claim 47 is directed to the abstract idea (or mental process) of a wagering game method.

Step 2B: Does Claim 46 Recite an Inventive Concept?

We next consider whether claim 47 recites elements, which are *in addition to* recitations of a mental process, individually or as an ordered combination, that transform the abstract ideas into a patent-eligible application, e.g., by providing an inventive concept. *Alice*, 573 U.S. at 217–18.

As discussed *supra*, claim 47’s recitation of generic computing components are no more than instructions to apply the judicial exception using a generic computer. *See* MPEP § 2106.05(f) (“Use of a computer or other machinery in its ordinary capacity for . . . tasks (*e.g.*, to receive, store, or transmit data) or simply adding a general purpose computer or computer components after the fact to an abstract idea (*e.g.*, a fundamental economic practice . . .) does not provide significantly more.”).

Further, to the extent the recitation of determining a second likelihood value responsively to comparing a first set of likelihood values to a predetermined value derived from data regarding expected biases of the users is an inventive concept—which we decline to consider, such a claim limitation is a recitation of a mental process (or abstract idea) and thus, not considered as a recitation *in addition to* the mental process itself. *See Synopsys, Inc. v. Mentor Graphics Corp.*, 839 F.3d 1138, 1151 (Fed. Cir. 2016) (“But, a claim for a *new* abstract idea is still an abstract idea.”).

In our view, claim 47 fails to add a specific limitation beyond the judicial exceptions that is not “well-understood, routine, conventional” in the

field, but instead “simply appends well-understood, routine, conventional activities previously known to the industry, specified at a high level of generality, to the judicial exception.” *See* Revised Guidance, 84 Fed. Reg. at 56. As discussed *supra*, the recited computing components perform generic computing functions.

For the reasons discussed above, we find no element or combination of elements recited in claim 46 that contains any “inventive concept” or adds anything “significantly more” to transform the abstract concept into a patent-eligible application. *Alice*, 573 U.S. at 221.

Accordingly, we sustain the Examiner’s decision rejecting claim 47, and claims 29–40, 48–50, and 53, which fall therewith, under 35 U.S.C. § 101 as being directed to patent-ineligible subject matter.

Non-Statutory Double Patenting

Appellants chose not to present arguments addressing the Examiner’s rejections of claims 29–40, 47–50, and 53 on the grounds of non-statutory double patenting; therefore, we summarily sustain these rejections. Appeal Br. 6–9; *see* MPEP § 1205.02 (“If a ground of rejection stated by the examiner is not addressed in the appellant’s brief, appellant has waived any challenge to that ground of rejection and the Board may summarily sustain it, unless the examiner subsequently withdrew the rejection in the examiner’s answer.”).

DECISION

We AFFIRM the Examiner’s rejection of claims 29–40, 47–50, and 53 under 35 U.S.C. § 101 as directed to patent ineligible subject matter.

Appeal 2018-008770
Application 13/600,589

We AFFIRM the Examiner's rejections of claims 29–40, 47–50, and 53 on the grounds of non-statutory double patenting as unpatentable over: (i) claims 1–78 of U.S. Patent No. 7,942,734; (ii) claims 1–33 of U.S. Patent No. 8,070,595; and (iii) claims 1–21 of U.S. Patent No. 8,257,165.

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