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901 NORTH GLEBE ROAD, 11TH FLOOR
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UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

Ex parte YOSHIKAZU FUJITA

Appeal 2016-002791
Application 12/557,049
Technology Center 3700

Before LINDA E. HORNER, JEFFREY A. STEPHENS, and
ERIC C. JESCHKE, *Administrative Patent Judges*.

JESCHKE, *Administrative Patent Judge*.

DECISION ON APPEAL

STATEMENT OF THE CASE

Yoshikazu Fujita (“Appellant”)¹ seeks review under 35 U.S.C. § 134(a) of the Examiner’s decision, as set forth in the Final Office Action dated March 3, 2015 (“Final Act.”), and as further explained in the Advisory Action dated May 28, 2015 (“Adv. Act.”), rejecting claims 1–22 and 24–26 under 35 U.S.C. § 101 as directed to patent-ineligible subject matter. We have jurisdiction under 35 U.S.C. § 6(b).

We affirm.

¹ Appellant identifies Nintendo Co. Ltd. and Skip Ltd. as the real parties in interest. Appeal Br. 3.

BACKGROUND

The disclosed subject matter “relates to a storage medium storing a puzzle game program, a puzzle game apparatus, and a puzzle game control method.” Spec. 0, ll. 10–11.² Claims 1, 9, 10, 11, 17, 18, 21, and 24 are independent. Claim 1 is reproduced below, with bracketed letters added to identify each clause:

1. A non-transitory computer readable storage medium storing computer readable instructions of a puzzle game program for use with a computing system that includes at least one processor, the computing system being coupled to a user input device configured to accept input provided by a user and a display configured to display images output by the computing system, the computer readable instructions comprising instructions configured to cause the computing system to:

[A] continually output, to the display, images of a game field that includes a plurality of piece objects arranged thereon;

[B] process a first input provided to the user input device and, responsive to the first input, select at least one of the plurality of piece objects included in the game field based on the first input;

[C] process a second input provided to the user input device;

[D] responsive to the processed second input, change a position within the game field of the selected at least one of the plurality of piece

² Citations to the Specification refer to the version filed on January 17, 2012. In that version, the second page is numbered as page 1. Thus, we use the page numbering provided for all but the first page, which we identify as page 0.

objects to a different position within the game field;

[E] responsive to the processed second input, change, in accordance with a predetermined rule of the puzzle game program, a display form of the selected at least one of the plurality of piece objects from a first display form to a second display form that is different from the first display form such that how the at least one of the plurality of piece objects is represented in the images is changed;

[F] determine whether all or part of the plurality of piece objects satisfy a predetermined condition when the display form or the position within the game field of the at least one of the plurality of piece objects is changed; and

[G] automatically update the game field in accordance with the determination of whether all or part of the plurality of piece objects satisfy the predetermined condition.

DISCUSSION

Appellant argues the patentability of independent claim 1, stating that “[f]or purposes of analysis under 35 U.S.C. § 101, the other independent claims generally set forth similar features in this art area (*e.g.*, a computer game).” Appeal Br. 24.³ Appellant does not provide separate arguments for any dependent claims. We select independent claim 1 as representative, with the remaining claims standing or falling with claim 1. *See* 37 C.F.R. § 41.37(c)(1)(iv) (2014).

³ Despite this statement, Appellant discusses certain language in independent claim 9. *See* Appeal Br. 27. We address this discussion below.

The Supreme Court has established “a framework for distinguishing patents that claim laws of nature, natural phenomena, and abstract ideas from those that claim patent-eligible applications of those concepts.” *Alice Corp. v. CLS Bank Int’l*, 134 S. Ct. 2347, 2355 (2014) (citing *Mayo Collaborative Servs. v. Prometheus Labs, Inc.*, 132 S. Ct. 1289, 1294 (2012)). Under that framework, we first “determine whether the claims at issue are directed to one of those patent-ineligible concepts”—i.e., a law of nature, a natural phenomenon, or an abstract idea. *Id.* If so, we secondly “consider the elements of each claim both individually and ‘as an ordered combination’ to determine whether the additional elements ‘transform the nature of the claim’ into a patent-eligible application.” *Id.* (quoting *Mayo*, 132 S. Ct. at 1298, 1297). The Supreme Court has described the second step as “a search for an ‘inventive concept’—i.e., 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.’” *Id.* (alteration in original) (quoting *Mayo*, 132 S. Ct. at 1294).

A. First Step

In the Final Office Action, the Examiner stated that the claims are “directed to a puzzle game.” Final Act. 2. In the Advisory Action, the Examiner stated the following about the first step of the analysis: (1) “The present claims are directed to an abstract idea that may be characterized as a certain method of organizing human activities.”; (2) “The puzzle game at issue may also be interpreted as an idea of itself.”; and (3) “Finally, the puzzle game may also be interpreted as a mathematical relationship/formula

since the movement of game pieces and changing display forms may be described as geometric or mathematical functions.” Adv. Act. 2.⁴

As to the Examiner’s statement that “[t]he puzzle game at issue may also be interpreted as an idea of itself” (Adv. Act. 2), Appellant argues that “[t]he ‘idea of itself’ sub-category is closely constrained to actual ‘ideas’ as opposed to physical elements” and that “a claim that includes ‘machinery’ in combination with a ‘principle’ is not directed to the ‘principle’ (even if the principle was the focus of the development of the invention), but is rather directed to the combination.” Appeal Br. 26, 27 (discussing *Le Roy v. Tatham*, 55 U.S. 156, 174 (1852)). According to Appellant, “[t]he instant claims are not set forth so as [to] cover . . . a principle or other similar concept” and “are therefore not directed merely to a principle or other such concept, but rather require a combination of specific ‘machine’ elements that operate in a particular manner.” *Id.* at 26, 27. Appellant argues that the “updated Guidelines also support the conclusion that the claims are not directed to an ‘idea of itself’” because “[a] puzzle game as set forth in this application is *not* a purely mental process, cannot be performed in the human mind, and cannot be performed using merely pen and paper.”⁵ Appeal Br.

⁴ In this discussion, the Examiner refers to the 2014 Interim Guidance on Patent Subject Matter Eligibility, 79 Fed. Reg. 74,618 (Dec. 16, 2014).

⁵ With “updated Guidelines,” Appellant refers collectively to the various documents provided as the July 2015 Update on Subject Matter Eligibility (“July 2015 Update”). *See* July 2015 update on subject matter eligibility, <https://www.uspto.gov/patent/laws-and-regulations/examination-policy/subject-matter-eligibility-examination-guidance-date> (last visited Nov. 3, 2017) (providing links to various documents in July 2015 Update); *see also* July 2015 Update on Subject Matter Eligibility, 80 Fed. Reg. 45,429 (July 30, 2015); Appeal Br. 21 (discussing the July 2015 Update).

27–28; July 2015 Update, Quick Reference Sheet at 2 (describing “An Idea ‘Of Itself’” as “An idea standing alone such as an uninstigated concept, plan or scheme, as well as a mental process (thinking) that ‘can be performed in the human mind, or by a human using a pen and paper’” (quoting *CyberSource Corp. v. Retail Decisions, Inc.*, 654 F.3d 1366, 1372 (Fed. Cir. 2011))).

The Examiner responds that “[a] game symbol (i.e., a piece object) can, for example, be rotated to produce a changed display form” and states that “[t]his step can be accomplished either via pencil and paper by rotating a piece of paper, drawing on the piece of paper, or mentally by imagining a symbol rotated.” Ans. 11. According to the Examiner, “[t]here is nothing in the claims so complex or complicated to prevent the rotation of symbols on a piece of paper or in the mind and then comparing the outcome to a predetermined condition.” *Id.*

Appellant replies that the finding that “[t]his step can be accomplished either via pencil and paper or mentally” (Ans. 6) is “completely incorrect” because “[a]ll of the steps or elements set forth in the independent claims are expressly tied to a computer or processing system.” Reply Br. 4.

Under the first step, we “look at the ‘focus of the claimed advance over the prior art’ to determine if the claim’s ‘character as a whole’ is directed to excluded subject matter.” *Affinity Labs of Texas, LLC v. DirectTV, LLC*, 838 F.3d 1253, 1257 (Fed. Cir. 2016) (quoting *Elec. Power Grp., LLC v. Alstom S.A.*, 830 F.3d 1350, 1353 (Fed. Cir. 2016)). Thus, although we consider the claim as a whole, the “directed to” inquiry focuses on the claim’s “character as a whole.” Here, Appellant does not apprise us

of error in the determination that the claims are directed to an abstract idea—specifically, an “idea of itself.” *See* Final Act. 2; Ans. 5–6.

A method that can be performed in the human mind or by a human using a pen and paper is directed to an abstract idea.⁶ *See CyberSource Corp. v. Retail Decisions, Inc.*, 654 F.3d 1366, 1371–72 (Fed. Cir. 2011); *see also Synopsys, Inc. v. Mentor Graphics Corp.*, 839 F.3d 1138, 1146–47 (Fed. Cir. 2016) (“While the Supreme Court has altered the § 101 analysis since *CyberSource* in cases like *Mayo* and *Alice*, we continue to ‘treat[] analyzing information by steps people go through in their minds, or by mathematical algorithms, without more, as essentially mental processes within the abstract-idea category.’” (quoting *Elec. Power Grp.*, 830 F.3d at 1354)).

In *CyberSource*, the Federal Circuit discussed the decision in *Gottschalk v. Benson*, 409 U.S. 63, 67 (1972). *See CyberSource*, 654 F.3d at 1371. In a passage from the *Benson* decision quoted in the relevant discussion in *CyberSource*, the Supreme Court stated:

The conversion of BCD numerals to pure binary numerals can be done mentally The method sought to be patented varies the ordinary arithmetic steps a human would use by changing the order of the steps, changing the symbolism for writing the multiplier used in some steps, and by taking subtotals after each

⁶ Although claim 1 recites “[a] non-transitory computer readable storage medium storing computer readable instructions . . . configured to cause the computing system to” perform certain steps, we determine that claim 1 is not “‘truly drawn to a specific’ computer readable medium, rather than to the underlying method.” *CyberSource Corp. v. Retail Decisions, Inc.*, 654 F.3d 1366, 1374–75 (Fed. Cir. 2011) (internal quotation marks omitted). Thus, we treat claim 1 as a method claim for patent-eligibility purposes. *See id.* at 1375.

successive operation. The mathematical procedures can be carried out in existing computers long in use, no new machinery being necessary. And, as noted, they can also be performed without a computer.

Benson, 409 U.S. at 67 (emphasis added). Based on this passage, the Federal Circuit stated that, “in finding that the process in *Benson* was not patent-eligible, the Supreme Court appeared to endorse the view that *methods which can be performed mentally, or which are the equivalent of human mental work, are unpatentable abstract ideas.*” *CyberSource*, 654 F.3d at 1371 (emphasis added); *see also Benson*, 409 U.S. at 67 (discussing the “longstanding rule that ‘(a)n idea of itself is not patentable’” (quoting *Rubber-Tip Pencil Co. v. Howard*, 87 U.S. 498, 507 (1874))). Notably, the Supreme Court (and the Federal Circuit) made these statements despite that the claims in *Benson* recited language limiting the method to performance on a general-purpose computer. *See Benson*, 409 U.S. at 64 (“The claims were not limited to any particular art or technology, to any particular apparatus or machinery, or to any particular end use. They purported to cover any use of the claimed method in a general-purpose digital computer of any type.”); *see also id.* at 73–74 (providing independent claims 8 and 13).

Thus, we are not apprised of error in the finding that claim 1 can be accomplished either using a pencil and paper or mentally (and thus is directed to “an idea of itself”) merely because the recited steps “are expressly tied to a computer or processing system.” Reply Br. 4; *CyberSource*, 654 F.3d at 1375 (“That purely mental processes can be unpatentable, even when performed by a computer, was precisely the holding of the Supreme Court in *Gottshalk v. Benson*[, 409 U.S. 63 (1972)].”).

Moreover, that independent claim 9, for example, recites generic computer components such as “an input device,” “a display that includes a display screen for displaying images thereon,” and “a processing system that includes at least one hardware processor coupled to a memory, the input device, and the display” does not (as asserted by Appellant) show that the claims are not directed to “an idea of itself.” *See* Appeal Br. 27; Ans. 11 (“the inclusion of a computer (or hardware) in the claim of an abstract idea does not necessarily preclude the classification as ‘an idea of itself’”).

For these reasons, we are not apprised of error in the Examiner’s determination that the claims at issue are directed to an abstract idea.

B. Second Step

As to the second step under the Supreme Court’s framework, the Examiner stated (1) that “[t]he claims do not include additional elements that are sufficient to amount to significantly more than the judicial exception because the puzzle game is applied to generically recited computer elements” and (2) that “[t]he generically recited computer elements do not add a meaningful limitation to the abstract idea because they would be routine in any computer implementation.” Final Act. 2.

First, Appellant argues that, in the Final Office Action and the Advisory Action, the Examiner “*fails* to consider all of the elements (and their combination) that are required by the claims” and argues that “[t]his is not a proper application of step 2 of Alice.” Appeal Br. 29. Appellant states that “step 2 requires consideration of the ‘claim elements separately’ and ‘as an ordered combination’” (quoting *Alice*, 134 S. Ct. at 2359) and argues that “[t]he rejection fails on this fundamental inquiry and is instead merely a broad conclusion that is completely divorced from the actual features

required by the claims.” Appeal Br. 29. Appellant argues that “claim 1 requires significantly more than just ‘a puzzle game.’ For example, the two ‘responsive’ elements are ‘more than a drafting effort’ designed to monopolize ‘puzzle games’ and are not general purpose computer components.” *Id.* According to Appellant, “[t]hese additional features are *not* ‘routine,’” but rather, “they are new and ‘substantially more’ than just a generic puzzle game.” *Id.*

In the Answer, the Examiner states:

Claim 1 does not include additional elements that are sufficient to amount to significantly more than the judicial exception.

The examiner is unable to identify an improvement to another technology or technical field. The claim does not recite limitations that improve the functioning of the computer itself. **Claim 1** recites a non-transitory computer readable storage medium, a computing system, a processor, a user input device, and a display. These appear to be components of a general purpose computer rather than a particular machine. There is no transformation or reduction of a particular article to a different state or thing. The limitations rather broadly describe receiving user inputs, processing data, comparing the processed data to a predetermined condition, and updating fields. These functions are similar to those that the courts have recognized as being well-understood, routine, and conventional functions (July 2015 Update [p. 7]). Instead, the claims recite limitations that are well-understood, routine and conventional activities previously known to the industry, specified at a high level of generality and applied to a general purpose computer.

When looked at individually and as a whole, **claim 1** is determined to be an abstract idea without “significantly more,” and thus not patent eligible.

Ans. 8; *see also id.* at 13 (“The claim limitations, when considered separately or as an ordered combination, fail to recite limitations that qualify as ‘significantly more.’”).

Appellant replies that “it is clear that the Answer (like the Final Office Action and Advisory before it) has *failed* to perform the proper analysis under step 2 of Alice.” Reply Br. 5. Appellant argues that the Examiner provided (1) “no discussion of the specific combination – i.e., how two of the elements are ‘responsive’ to the processed second input” (*see* clause E of claim 1 as identified above), (2) “no discussion of the automatically updated game field” (*see* clause G of claim 1), and (3) “no discussion of the particular way in which the game piece is both changed in display form and position” (*see* clauses E and F of claim 1). *Id.* at 6.

We are not apprised of error by this argument. The Examiner has, as required under the second step of the Supreme Court’s framework, considered the limitations of claim 1 “both individually and ‘as an ordered combination’ to determine whether the additional elements ‘transform the nature of the claim’ into a patent-eligible application.” *Alice*, 134 S. Ct. at 2355 (quoting *Mayo*, 132 S. Ct. at 1298, 1297). As to clauses E, F, and G highlighted by Appellant, the Examiner states that the limitations in claim 1 “broadly describe receiving user inputs, processing data, comparing the processed data to a predetermined condition, and updating fields” and that “[t]hese functions are similar to those that the courts have recognized as being well-understood, routine, and conventional functions.” Ans. 8 (citing July 2015 Update, Subject Matter Eligibility at 7 (providing a list of “computer functions” that “courts have recognized . . . to be well-understood, routine, and conventional functions when they are claimed in a merely generic manner”)). Appellant asserts that clauses E through G, “either individually, and especially in combination, are ‘significantly more’ than just a generic puzzle game” (Reply Br. 6), but does not explain why

these clauses represent significantly more than implementing the abstract idea on a general-purpose computer. *See Alice*, 134 S. Ct. at 2358 (stating that “the mere recitation of a generic computer cannot transform a patent-ineligible abstract idea into a patent-eligible invention”).

Second, Appellant argues: “In short, the scope of the claimed subject matter is sufficiently specific that the preemption concern that ‘undergirds’ 35 U.S.C. § 101 jurisprudence is not an issue.” Appeal Br. 30. Appellant asserts that “[t]he instant claims do not cover every general purpose computer that implements a generic ‘puzzle game,’ but rather, “as a result of the specific and detailed technical features recited in the claims, there are tangible assurances that the claims do not monopolize the alleged abstract idea of a ‘puzzle game.’” *Id.*

The Supreme Court has stated that “patents that . . . integrate the building blocks [of human ingenuity] into something more, []thereby transform[ing] them into a patent-eligible invention . . . pose no comparable risk of pre-emption, and therefore remain eligible for the monopoly granted under our patent laws.” *Alice*, 134 S. Ct. at 2354–55 (citations and quotations omitted). Although preemption “might tend to impede innovation more than it would tend to promote it, ‘thereby thwarting the primary object of the patent laws’” (*id.* at 2354 (citing *Mayo*, 132 S. Ct. at 1293)), “the absence of complete preemption does not demonstrate patent eligibility.” *Ariosa Diagnostics, Inc. v. Sequenom, Inc.*, 788 F.3d 1371, 1379 (Fed. Cir. 2015); *see also OIP Techs., Inc. v. Amazon.com, Inc.*, 788 F.3d 1359, 1362–63 (Fed. Cir. 2015) (“[T]hat the claims do not preempt all price optimization or may be limited to price optimization in the e-commerce setting do not make them any less abstract.”). Thus, that the

claims here may recite “specific and detailed technical features” (Appeal Br. 30) does not demonstrate error in the determination that the claims are directed to patent-ineligible subject matter.

Third, Appellant argues that the Examiner’s position “results in a *de facto* ban on all process claims and computer related inventions (whether related to games or not).” Reply Br. 2. We disagree. For the reasons discussed above, we are not apprised of error in the Examiner’s analysis under the Supreme Court’s framework. *See also RecogniCorp, LLC v. Nintendo Co.*, 855 F.3d 1322, 1326 (Fed. Cir. 2017) (stating, “[f]or example, we have held that software patent claims satisfy *Alice* step one when they are ‘directed to a specific implementation of a solution to a problem in the software arts,’ such as an improvement in the functioning of a computer” (quoting, *Enfish, LLC v. Microsoft Corp.*, 822 F.3d 1327, 1338–39 (Fed. Cir. 2016))).

Fourth, Appellant argues that “[d]espite the unequivocal nature of the express language of 35 U.S.C. § 100(b) and 35 U.S.C. § 101, according to the Supreme Court, the broad scope of this language includes an *implicit exception* where ‘laws of nature, natural phenomena, and abstract ideas’ are not patent-eligible.” Reply Br. 7 (quoting *Alice*, 134 S. Ct. at 2354). Appellant argues that “[w]hile not directly addressed by the Supreme Court in *Alice*, exceptions to a more general statutory provision should be narrowly applied in order to give full purpose and effect to the operation of the statute at issue.” *Id.* Appellant argues that “given that the exception is *judicially* created[,] it would be consistent for an even more narrow interpretation so that the expressly provided statutory language may be given full effect” and

that “[t]o do . . . otherwise risks swallowing all of patent law.” *Id.* (citing *Alice*, 134 S. Ct. at 2354).

We are not apprised of error based on this argument. Although Appellant asserts, for example, that “the Answer’s approach is in contrast to existing precedent and runs the risk of having the subject matter eligibility exception swallow the broader, statutorily provided rule” (Reply Br. 7), with this discussion, Appellant does not specifically identify alleged error by the Examiner. *See id.* at 6–7 (section with heading “**Interpreting Alice**”); *see also* 37 C.F.R. § 41.37(c)(1)(iv) (“The arguments shall explain why the examiner erred as to each ground of rejection contested by appellant.”).

For the reasons above, we sustain the rejection of independent claim 1. Claims 2–22 and 24–26 fall with claim 1.

DECISION

We *affirm* the decision to reject claims 1–22 and 24–26 under 35 U.S.C. § 101.

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).

AFFIRMED