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UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

Ex parte MARK J.H. HSIAO, PEI-YUN S. HSUEH,
SREERAM RAMAKRISHNAN, and LIANGZHAO ZENG

Appeal 2017-005126
Application 13/614,189¹
Technology Center 3700

Before KEN B. BARRETT, WILLIAM V. SAINDON, and
ANTHONY KNIGHT, *Administrative Patent Judges*.

KNIGHT, *Administrative Patent Judge*.

DECISION ON APPEAL

STATEMENT OF CASE

Appellants appeal under 35 U.S.C. § 134 from a rejection of claims 1–10 and 13–16² under 35 U.S.C. § 101 as being directed to patent-ineligible subject matter. We have jurisdiction under 35 U.S.C. § 6(b).

We AFFIRM.

¹ According to Appellants, the real party in interest is International Business Machine. Appeal Br. 1.

² Claims 11 and 12 are canceled. Appeal Br. 12, Claims App'x.

CLAIMED SUBJECT MATTER

The disclosure is directed to a computer implemented method for a wellness decision support system that uses a risk assessment model to select an action plan for a user. Spec. 2:3–10. Claim 1, reproduced below, is the sole independent claim and is illustrative of the claimed subject matter:

1. A method for providing one or more user-centric wellness decision support services, wherein the method comprises:

providing an interface that facilitates identification of a risk assessment model of interest for a user, wherein the interface is communicatively linked to at least one computing device;

identifying, based on user input via the interface, (i) a risk assessment model, (ii) one or more risk factors, and (iii) a user-specified level of importance associated with intervention on each of the one or more risk factors, wherein said identifying comprises processing, executed by the at least one computing device, the user input provided via the interface against a wellness knowledge repository communicatively linked to (i) the interface and (ii) the at least one computing device;

applying the risk assessment model to one or more user wellness records to assess the user's wellness risk level, wherein said applying is executed by the at least one computing device in communication with a stored personal wellness record associated with the user; and

ranking a set of multiple action plans (*ap*) based on the assessed user wellness risk level and the one or more user wellness records (*u*), wherein said ranking is executed by the at least one computing device in communication with the stored personal wellness record associated with the user and comprises (i) matching a description of each of the multiple action plans (*ap*) to the one or more user wellness records (*u*), (ii) aggregating the level of importance (*imp*) for each of the one or more risk factors (*f*) under each of the multiple action plans, and (iii)

determining an importance level of each of the multiple action plans by computing a weighted average (w) of factor importance within each of the multiple action plans via:

$$\text{imp}(u_a, ap_i) = \sum_{f_i \in ap_i} w_{f_i} \text{imp}(u_a, f_i), \text{ wherein } w_{f_i}' = w_{f_i} \div \sum_{i=1}^n w_{f_i}, \text{ and}$$

wherein each of the multiple action plans comprises one or more relevant disease management and lifestyle interventions.

OPINION

Appellants presents arguments for independent claim 1, but do not present separate arguments for the remaining claims subject to this rejection. *See* Appeal Br. 5–8. The claims will be treated as a group, with claim 1 being representative, in accordance with 37 C.F.R. § 41.37(c)(1)(iv) (2014). Claims 2–10 and 13–16 stand or fall with claim 1.

Section 101 of the patent law provides that one may obtain a patent for “any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof.” 35 U.S.C. § 101. The Supreme Court has held that this provision includes important exceptions, notably those that prohibit one from patenting abstract ideas, laws of nature, or natural phenomena. *Alice Corp. Pty. Ltd. v. CLS Bank Int’l*, 134 S. Ct. 2347, 2354 (2014). Although a law of nature or an abstract idea is not patentable, the application of these concepts may be patentable. *Mayo Collaborative Servs. v. Prometheus Labs., Inc.*, 132 S. Ct. 1289, 1293–94 (2012).

In deciding this Appeal, we apply the framework as set forth by the Supreme Court in *Mayo* and *Alice*. According to the *Mayo* and *Alice*

framework, to determine whether claims are directed to ineligible subject matter, we apply the two-step test of *Mayo*, *id.* at 1296–97, which has been further explained in *Alice*, 134 S. Ct. at 2355. First, we determine whether the claims at issue are directed to a patent-ineligible concept such as an abstract idea. *Id.* Second, we “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.” *Id.* at 2357 (quoting *Mayo*, 132 S. Ct. at 1294, 1298). Although the second step in the *Mayo/Alice* analysis includes a search for an inventive concept, the analysis is not an evaluation of novelty or nonobviousness, but rather, 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*, 134 S. Ct. at 2355 (quoting *Mayo*, 132 S. Ct. at 1294).

The Federal Circuit has described the first step as a determination of the “basic character of the [claimed] subject matter.” *Internet Patents Corp. v. Active Network, Inc.*, 790 F.3d 1343, 1348 (Fed. Cir. 2015) (citing *Bancorp Servs., L.L.C. v. Sun Life Assurance Co. of Canada*, 687 F.3d 1266, 1273–74 (Fed. Cir. 2012)). The Federal Circuit has also indicated that this step should determine whether a claimed method “recites an abstraction — an idea, having no particular concrete or tangible form.” *Ulramercial, Inc. v. Hulu, LLC*, 772 F.3d 709, 715 (Fed. Cir. 2014); *see also Alice*, 134 S. Ct. at 2355 (“The ‘abstract ideas’ category embodies ‘the longstanding rule that ‘[a]n idea of itself is not patentable.’” (quoting *Gottschalk v. Benson*, 93 S. Ct. 253, 255 (1972) (further quotations and citations omitted)).

The Examiner's Step One Analysis

The Examiner determines that the claims are directed to the abstract idea of insurance and risk analysis in that the claimed inventive concept is an “effort of pure thought.” Final Act. 4–5; Ans. 8–11. Analyzing the claims as a whole, the claims recite nothing more than a method of using an algorithm to rank a set of multiple action plans using a weighted average of factor of importance. Appeal Br. 10 (Claims App’x.). As the Examiner determined, all the steps could be performed by a human. *See* Final Act. 5. (“The claim can be understood to merely require a human being, such as an analyst, to operate a computer in an ordinary way, for the benefits of speed, long-distance communication, and retrieval of data, which are well-known benefits of using computers for many applications.”). The present claims fall into the computer-as-a-tool category. *See Enfish, LLC v. Microsoft Corp.*, 822 F.3d 1327, 1336 (Contrasting claims directed to “an improvement to computer functionality itself” from claims directed to “economic or other tasks for which a computer is used in its ordinary capacity.”). *See also Bilski v. Kappos*, 130 S. Ct. 3218, 3230 (Explaining that claims containing an algorithm are unpatentable not because they contained the algorithm but, because once that algorithm was assumed to be within the prior art, the application, considered as a whole, contained no patentable invention.)” Thus, the Examiner correctly determined that the claims are directed to an abstract idea.

The Examiner's Step Two Analysis

In the Final action, the Examiner further determines that the claim limitations when considered individually or as an ordered combination did

not amount to significantly more than the judicial exception. Final Act. 5–6; Ans. 11–14. The Examiner bases these determinations on the fact that a generic computer may be used to perform the invention and generic computers performing their intended function have been held by the Supreme Court to be routine and conventional. Final Act. 5–6.

Claim 1 explicitly recites a method of using an algorithm to rank a set of multiple action plans using a weighted average of factor of importance. The claim itself, however, does not describe any particular way for the computer to go about such ranking. Appellants' Specification does not describe any new or unique computer hardware or software to perform these features. *See* Spec 19:20–22 (“These computer program instructions may be provided to a processor of a general purpose computer, special purpose computer, or other programmable data processing apparatus”), *see also id.* at 21:6–10 (“[I]t should be understood that the components illustrated herein may be implemented in various forms of hardware, software, or combinations thereof; for example, application specific integrated circuit(s) (ASICS), functional circuitry, one or more appropriately programmed general purpose digital computers with associated memory.”). As such, we agree with the Examiner’s finding that claim 1 requires only routine computer hardware. Consistent with the Supreme Court’s decision in *Benson*, we conclude that simply reciting the use of a generic computer functionality in claim 1 to lend speed or efficiency to the performance of the abstract idea (ranking action plans) does not meaningfully limit claim scope for purposes of patent eligibility. *See Benson*, 93 S. Ct. at 255 (invalidating as patent-ineligible claimed processes that “can be carried out in existing computers long in use, no new machinery being necessary”). The Examiner

is also correct in the determination that the claimed invention did not amount to significantly more than the judicial exception because Appellants' Specification and claims do not require unique hardware or software but conventional computer components and conventional software.

Appellants' Arguments

Appellants argue that “the specific requirements of the independent claims include multiple discrete, narrowing implementation limitation [] have largely been ignored in the Examiner’s written analysis.” Reply Br. 4. The Examiner finds that the claims are directed to a method of organizing human activity and more pertinently, “insurance and risk analysis.” Final Act. 4–5. Citing cases showing similar concepts that were previously found abstract by the courts is one way to show that the claims of an application are abstract. *See Amdocs (Israel) Ltd. v. Openet Telecom, Inc.*, 841 F.3d 1288, 1294 (Fed. Cir. 2016) (“[T]he decisional mechanism courts now apply is to examine earlier cases in which a similar or parallel descriptive nature can be seen—what prior cases were about, and which way they were decided.”).

Further, in this regard, the Examiner cites the decision in *Cyberfone Systems v. CNN Interactive Group, Inc.* 558 Fed. App’x. 988 (Fed. Cir. 2014) (non-precedential), *see* Ans. 3. The Examiner determines that Appellants’ use of categories to organize, store and transmit information is similar to the concept of categorical data storage found to be patent ineligible in *Cyberfone. Id.* The Examiner further states that “*Alice* [] provides an example of computer functions and components that have been treated as conventional.” *Id.* at 4. We are not apprised of error in the

Examiner’s determination that the claims contain a patent ineligible abstract idea.

Appellants assert that the invention recited in the claims is much like the patent eligible invention recited in *Trading Technologies International, Inc. v. CQG, Inc.* (Fed. Cir. 2017). Appellants argue that the instant claims require the following features.

“[A] structured graphical user interface (“a wellness knowledge repository communicatively linked to (i) the interface and (ii) the at least one computing device”) with a “prescribed functionality directly related to the user interface’s structure that is addressed to and resolves a specifically identified problem in the prior state of the art.”

Reply Br. 4.

Appellants refer to the Specification page 1, lines 13–24 as an example in support of their position. *Id.* Appellants’ claims do not recite these features as limitations. Further, Appellants’ Specification does not describe any new or unique computer hardware or software. *See* “The Examiner’s Step Two Analysis” *supra*. Further, the law is clear that simply programming a computer to perform what would otherwise be an abstract idea is not sufficient to impart patent eligibility. *See Alice*, 134 S. Ct. at 2359.

Appellants argue that the claimed invention recites “a combination of elements sufficient to ensure that the claims are significantly more than the alleged abstract idea.” Reply Br. 5, Appeal Br. 5. Further, Appellants contend that they are “adding a specific limitation other than what is well-understood, routine and conventional in the field.” Appeal Br. 5. Appellants, however, do not identify this limitation.

Appellants' argument does not explain how the features of the claimed invention amount to significantly more than the abstract idea. Appellants have neither identified the claim limitations that are directed to solving a problem in the computer arts, nor stated what problem in the computer arts is being solved. Instead, Appellants' claims are stated at a high level of generality and do not provide an inventive concept sufficient to transform the abstract idea into patent-eligible subject matter. *See Ultramercial, Inc. v. Hulu, LLC*, 772 F.3d 709, 716 (Fed. Cir. 2014) (quoting *Alice Corp. 134 S. Ct. at 2357 (2014)*). Accordingly, without more, Appellants' argument that the claimed invention is an improvement in the computer art does not apprise us of error in the Examiner's rejection.

Appellants argue that the Examiner acknowledges that the claimed invention is novel and nonobvious because the Examiner has withdrawn the rejection based upon prior art. Thus, according to Appellants, the claims include "a specific limitation other than what is well-understood, routine and conventional in the field." Appeal Br. 6.

Although the second step in the *Mayo/Alice* analysis includes a search for an inventive concept, the analysis is not an evaluation of novelty or nonobviousness, but rather, 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*, 134 S. Ct. at 2355 (quoting *Mayo*, 132 S. Ct. at 1294). A novel and nonobvious claim directed to a purely abstract idea is, nonetheless, patent-ineligible. *See Mayo*, 132 S. Ct. at 1304. Further, "under 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). Appellants’ argument that the claims are novel and unobvious does not persuade us of error in the Examiner’s rejection because the determination of novelty and unobviousness are separate determinations from patent eligible subject matter.

Appellants argue that the “Examiner’s unsupported allegation that the claims implement the abstract idea ‘with routine, conventional activity’ is directly contradicted by the Examiner’s subsequent acknowledgement that the claims are novel and non-obvious.” Appeal Br. 6. The Examiner cites to *Alice* for support that a generic computer is routine and conventional. *See* Final Act. 6 (“[T]he claims simply instruct the practitioner to implement the abstract idea with routine, conventional activity. *See also Alice Corp. Pty. Ltd. v. CLS Bank Int’l.* 134 S. Ct. 2347 (2104)”).

The Court stated in *Alice* that implementing a mathematical algorithm on a computer is well-understood, routine and conventional. *See Alice*, 134 S. Ct. 2352 (“We hold that the claims at issue are drawn to the abstract idea of intermediated settlement, and that merely requiring generic computer implementation fails to transform that abstract idea into a patent-eligible invention.”). We agree with the Examiner’s determination that the computer of the claim is well-understood, routine and conventional. *See* “The Examiner’s Step Two Analysis” *supra*.

Appellants argue that “the Examiner has erred as a matter of law by alleging that ‘a novel abstract idea remains an idea, and cannot be per se eligible.’” Appeal Br. 7. To the extent that Appellants are arguing that a claim that includes an abstract idea is patent eligible subject matter if it

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includes something that is significantly more than the judicial exception. This is true; however, the Examiner did not err in determining that the claim lacks something that is significantly more than the judicial exception. Without the claim defining something that is significantly more than the judicial exception, the subject matter of the claim is patent-ineligible. Accordingly, Appellants' argument is unpersuasive.

Accordingly, we sustain the rejection of claim 1 based upon the reasoning discussed *supra*. We also sustain the rejection of claims 2–10 and 13–16. Thus, the rejection of claims 1–10 and 13–16 is sustained.

DECISION

For the above reasons, the Examiner's rejection of claims 1–10 and 13–16 is affirmed.

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