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UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

Ex parte HOLGER ULRICH EISELE, INGO PANCHYRZ,
and BEATE LINDQVIST

Appeal 2016-007183
Application 13/545,754
Technology Center 3600

Before JOSEPH L. DIXON, MAHSHID D. SAADAT, and
MATTHEW J. McNEILL, *Administrative Patent Judges*.

SAADAT, *Administrative Patent Judge*.

DECISION ON APPEAL

Appellants¹ appeal under 35 U.S.C. § 134(a) from the Examiner's
Final Rejection of claims 1–20.² We have jurisdiction under
35 U.S.C. § 6(b).

We affirm.

¹ According to Appellants, the real party in interest is SAP SE. App. Br. 3.

² Claim 18 has been subsequently cancelled.

STATEMENT OF THE CASE

Appellants' invention relates to systems and methods for processing of issues in an attempt to resolve the issues based on activities or questions applied to obtain data. *See* Spec. ¶ 13. The activities or questions are determined, at least in part, based on business rules or previous resolution of similar issues. *See id.* Exemplary claim 1 under appeal reads as follows:

1. A method comprising:
 - identifying an issue;
 - accessing a plurality of rules associated with resolving the issue;
 - accessing data associated with previous issue resolutions;
 - analyzing the identified issue based on the rules and the data associated with previous issue resolutions;
 - determining, using one or more processors, a first activity to perform based on the analyzing of the identified issue;
 - identifying results of performing the first activity;
 - determining whether the first activity resolved the issue;
 - and
 - responsive to determining that the first activity did not resolve the issue:
 - accessing an activity tree data structure to identify at least one sub-activity associated with the first activity;
 - further analyzing the identified issue based on the rules, the data associated with previous issue resolutions, the results of performing the first activity, and the at least one sub-activity; and
 - determining a second activity to perform based on the further analyzing of the identified issue.

Claims 1–20 stand rejected under 35 U.S.C. § 101 as being directed to patent-ineligible subject matter. *See* Final Act. 4.

Claims 1–20 stand rejected under 35 U.S.C. § 103(a) as being obvious over *Beaty et al.* (US 2009/0063387 A1, published Mar. 5, 2009) (“*Beaty*”) and *Suwa et al.* (US 5,043,915, issued Aug. 27, 1991) (“*Suwa*”). *See* Final Act. 5–13, Ans. 3–11.

ANALYSIS

We have reviewed the Examiner’s rejections in light of Appellants’ arguments in the Briefs. For the reasons discussed below, we are not persuaded by Appellants’ contentions that the Examiner erred in rejecting claims 1–20 under 35 U.S.C. §§ 101 and 103(a). We adopt as our own, the findings and reasons set forth by the Examiner in the Office Action from which this appeal is taken and in the Examiner’s Answer in response to Appellants’ Appeal Brief. *See* Final Act. 4–13, Ans. 11–20. For emphasis, we consider and highlight specific arguments as presented in the Briefs.

Section 101 Rejection

The Examiner rejects the claims under 35 U.S.C. § 101 because they are directed to patent-ineligible subject matter. *See* Final Act. 4. In particular, the Examiner finds the claims are directed to an abstract idea. *See id.* The Examiner also finds the additional features related to “hardware or software elements, such as processors or modules or computer readable mediums” do not amount to significantly more than the abstract idea. *See id.*

Appellants contend the Examiner erred. *See* App. Br. 9–20; Reply Br. 2–9. Appellants specifically argue the claims are not directed to “an idea or algorithm of itself” (App. Br. 11–12), “a mathematical formula” (App. Br. 12–13), or “a fundamental economic practice” (App. Br. 13–14). Appellants further argue that the claims, even if directed to an abstract idea, are not

unpatentable because “independent claim 1 recites a computer system that is *specialy-configured* to perform particular operations.” App. Br. 15–16. In that regard, Appellants assert claim 1 solves a technological problem that was in “conventional industry practice.” App. Br. 16–17. Additionally, Appellants argue the subject matter of claim 1 “cannot and does not preempt the making, using, and selling of basic tools of scientific and technological work.” App. Br. 17. Lastly, Appellants argue “the claimed solution is **‘necessarily rooted in computer technology in order to overcome a problem(s) specifically arising in the realm of computer networks.’**” App. Br. 18.

The Supreme Court in *Alice Corp. Pty. Ltd. v. CLS Bank Int’l*, 134 S. Ct. 2347 (2014), reiterated the framework set out in *Mayo Collaborative Services v. Prometheus Laboratories Inc.*, 566 U.S. 66 (2012) for “distinguishing patents that claim . . . abstract ideas from those that claim patent-eligible applications of those concepts.” 134 S. Ct. at 2355. The first step in the analysis is to determine if the claim is directed toward a patent-ineligible concept and, if so, the second step is to determine whether there are additional elements that transform the nature of the claim into a patent eligible application. *Alice*, 134 S. Ct. at 2355 (citing *Mayo*, 566 U.S. at 78–79). The second step searches for an inventive concept that is sufficient to ensure that the patent amounts to significantly more than a patent on the patent-ineligible concept. *Alice*, 134 S. Ct. at 2355 (citing *Mayo*, 566 U.S. at 72).

We are not persuaded by Appellants’ argument and agree, instead, with the Examiner that the claims recite the abstract idea of “gathering data, mathematically (logic) using the data to derive more data, and using the

derived data for resolving issues (using data structure shown as mathematical relationships/algorithms/formulas)” Ans. 12–13. As explained by the Examiner, the recited method merely “represents the abstract idea of collecting information and comparing generated new and stored information and using rules to identify options.” Ans. 13. Moreover, we observe that the claim can be performed in the human mind, or by a human using pen and paper. *See Cyberfone Systems, LLC v. CNN Interactive Group, Inc.* 558 Fed. Appx. 988 (Fed. Cir. 2014) (non-precedential); *SmartGene, Inc. v. Advanced Biological Laboratories, SA*, 555 Fed. Appx. 950 (Fed. Cir. 2014) (non-precedential).

Applying the first step, we agree with the Examiner that the claim is directed to the identified abstract ideas. Accordingly, we find that the claim is directed to a patent-ineligible concept.

Having determined that the claim is directed to a patent-ineligible concept, step two of the analysis considers whether the claim contains an inventive concept such as limitations that add significantly more to the claim so that it does not fully cover the abstract idea itself. *See Alice*, 134 S. Ct. at 2357. Here, we agree with the Examiner that the claims “do not include additional elements that are sufficient to amount to significantly more than the judicial exception. The limitations of *accessing, identifying, analyzing, determining, etc.*, are well-known, routine and conventional practices that require no more than a generic computer to perform generic computer functions.” Ans. 13. Moreover, the recited processor (in claims 1 and 19) or the activity manager (in claim 12) are the type of generic elements that have been determined by the Supreme Court to be insufficient to transform a patent-ineligible claim into one that is patent-eligible. *See Alice*, 134 S. Ct.

at 2358. Additionally, as explained by the Examiner (Ans. 14), “the claims do not purport to improve the functioning of the computer itself, or to improve any other technology or technical field” and using “an unspecified, generic computer does not transform an abstract idea into a patent-eligible invention.” As such, the claim includes no limitations that prevent it from covering the abstract idea itself. Therefore, we are unpersuaded by Appellants’ argument that the claims constitute an inventive concept that is significantly more than a patent on the patent-ineligible concept.

Appellants’ argument that the subject matter of claim 1 “cannot and does not preempt the making, using, and selling of basic tools of scientific and technological work” is also not persuasive. *See* App. Br. 17.

While preemption may signal patent ineligible subject matter, the absence of complete preemption does not demonstrate patent eligibility. . . . Where a patent’s claims are deemed only to disclose patent ineligible subject matter under the *Mayo* framework, as they are in this case, preemption concerns are fully addressed and made moot.

Ariosa Diagnostics, Inc. v. Sequenom, Inc., 788 F.3d 1371, 1379 (Fed. Cir. 2015); *see also OIP Technologies, Inc. v. Amazon.com, Inc.*, 788 F.3d 1359, 1362–63 (Fed. Cir. 2015).

Thus, for the reasons discussed above, we sustain the Examiner’s rejection of independent claims 1, 12, and 19, as well as claims 2–11, 13–17, and 20 not separately argued, under 35 U.S.C. § 101.

Section 103 Rejection

Appellants argue the Examiner acknowledges that:

Beaty nor Suwa explicitly state the term “tree data structure” (although the Examiner alleges that this concept is clearly implicit in both Beaty and Suwa), but asserts that Kaplan discloses “problem solving and further discloses activity tree

data structure.” (Citing Kaplan: Abstract; and paragraphs [0019]-[0020], [0022], and [0027]-[0032].)

App. Br. 21. Appellants further argue “Beaty does not disclose or suggest ‘an activity tree data structure’ and does not disclose or suggest ‘*accessing an activity tree data structure to identify at least one sub-activity associated with the first activity.*’” App. Br. 22. According to Appellants, the Examiner erred in finding “an activity tree data structure” is implicitly taught in Beaty and Suwa and in relying on Kaplan for showing this feature as evidence in support of such finding. *Id.* Additionally, Appellants argue “Kaplan does not disclose or suggest *an activity tree data structure.*” *Id.*

The Examiner responds by explaining that “Beaty was used to reject ‘accessing an activity tree to identify at least one sub-activity associated with the first activity’ and in fact does disclose an activity tree.” Ans. 16, *see also id.* at 17–20 (citing Beaty Fig. 1, ¶¶ 16-20, 22–26, 29–30, 41–46, 53–59). Further, the Examiner states that the “data structure” part of the claim was identified as an implicit feature of Beaty and Suwa, which is evidenced by Kaplan’s teaching of “data structures are part of activity trees.” Ans. 16. With respect to Kaplan, the Examiner explains:

As stated before, Kaplan was used to disclose “data structure” pertaining to a tree data structure. Kaplan states solving problems using a tree-based problem space and states “use of tree-structures as data structures that offer an efficient way of organizing information is well known in the field of computer science. . . . Since computer scientists invented online bulletin board systems in the early days of the Internet, it is not surprising that tree-like structures were used” (see for example ¶[] 0022). Therefore, Kaplan indeed states activity tree data structure.

Ans. 20. In fact, contrary to Appellants' contention (*see* Reply Br. 12), we understand the Examiner's proposed rejection to be premised not on finding either Beaty or Kaplan disclose an "activity tree data structure," but on Kaplan's disclosure as evidence to support the implicit disclosure of Beaty related to an *activity tree structure*, which is known to have a more efficient performance as a *data structure*. Thus, we agree with the Examiner (Ans. 20) that Kaplan's disclosure of discussion threads, in the form of tree structures, supports the Examiner's finding that Beaty's activity tree is in the form of a decision tree which is implicitly based on one or more databases.

DECISION

We affirm the Examiner's decision to reject claims 1–17, 19, and 20 under 35 U.S.C. § 101 and 35 U.S.C. § 103(a).

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