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UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

Ex parte JOHN McKETHAN

Appeal 2018-008600
Application 13/960,041
Technology Center 3600

Before JAMES R. HUGHES, JAMES W. DEJMEK, and STEVEN M. AMUNDSON, *Administrative Patent Judges*.

DEJMEK, *Administrative Patent Judge*.

DECISION ON APPEAL

Appellant[1] appeals under 35 U.S.C. § 134(a) from a Final Rejection of claims 35–54. Appellant has canceled claims 1–34. *See* App. Br. 3. We have jurisdiction over the remaining pending claims under 35 U.S.C. § 6(b).

We affirm.

[1] Throughout this Decision, we use the word "Appellant" to refer to "applicant" as defined in 37 C.F.R. § 1.42 (2017). Appellant identifies SkyBitz, Inc. as the real party in interest. App. Br. 3.

STATEMENT OF THE CASE

Introduction

Appellant's disclosed and claimed invention generally relates to using location tracking of movable assets ("e.g., dry van trailers, refrigerated trailers, flatbed trailers, cargo containers, intermodal rail containers, frac tanks, ISO containers, chassis, roll off bends, tank trailers, rail cars, etc.") "to monitor, track, and optimize asset utilization." Spec. ¶¶ 2, 3, 5. A geographic area (e.g., a trailer yard) may be defined by a customer. Spec. ¶ 28. Within the Specification and claims, the customer-defined geographic area may be referred to as a "landmark area." Spec. ¶ 28. In a disclosed embodiment, as assets enter or exit a landmark area, data (e.g., arrival and departure times from a landmark area) may be generated and analyzed. Spec. ¶¶ 31–34. According to the Specification, "any set of one or more statistics that provide an indication of asset utilization and non-utilization can be used to drive an asset pool management and geographical balancing application." Spec. ¶ 46.

Claim 35 is representative of the subject matter on appeal and is reproduced below:

> 35. A method, comprising:
>
> receiving, by an operations center from a user computing device, an identification of a plurality of customer defined landmark areas, wherein each of the plurality of customer defined landmark areas is associated with a separate geographic area;
>
> receiving, by the operations center, position reports from each of a plurality of assets;
>
> tracking, by the operation center based on the received position reports, an entry by some of the plurality of assets into a first of the plurality of customer defined landmark areas and an

> exit by some of the plurality of assets out of the first of the plurality of customer defined landmark areas, the tracking of the entry and the exit producing a current pool of assets at the first of the plurality of customer defined landmark areas, the current pool of assets comprising those of the plurality of assets that have entered, but not yet exited, the first of the plurality of customer defined landmark areas;
>
> determining, by the operations center based on the received position reports, a ranked list of the plurality of assets in the current pool of assets based on a turn time target that identifies a target amount of time between an entry and an exit of an asset from the first of the plurality of customer defined landmark areas; and
>
> transmitting, by the operations center, the ranked list to a load planner system via a communication network, the ranked list causing the load planner system to transmit an assignment instruction to one or more assets selected from the ranked list, the assignment instruction causing the one or more assets to depart from the customer defined landmark area, thereby adjusting the current pool of assets at the first of the plurality of customer defined landmark areas.

The Examiner's Rejection

Claims 35–54 stand rejected under 35 U.S.C. § 101 as being directed to patent-ineligible subject matter. Final Act. 2–5.

ANALYSIS[2]

Appellant disputes the Examiner's conclusion that the pending claims are directed to patent-ineligible subject matter. App. Br. 7–28; Reply Br. 3–

[2] Throughout this Decision, we have considered the Appeal Brief, filed May 25, 2018 ("App. Br."); the Reply Brief, filed September 2, 2018 ("Reply Br."); the Examiner's Answer, mailed July 3, 2018 ("Ans."); and

5. In particular, Appellant argues that, to the extent the Examiner finds certain features are well-understood, routine, or conventional, the Examiner has not supported properly those findings with evidence, in accordance with the *Berkheimer* Memorandum.[3] App. Br. 7–9; Reply Br. 3–4. Also, Appellant argues the claims recite significantly more than the alleged abstract idea. App. Br. 13–14. Specifically, Appellant asserts the use of "turn time" for assets "is a[n] unconventional mechanism for measuring efficiency and for allocating assets among different customer defined landmark areas" and "improve[s] utilization of assets." App. Br. 13–14.

Moreover, for independent claims 42 and 49, Appellant generally relies on the same arguments advanced with respect to independent claim 35. App. Br. 19–20, 24. In addition, for dependent claims 36–41, 43–48, and 50–54, Appellant asserts the claims are patent eligible for the same reasons as those for the claim from which they depend. App. Br. 15–28. Further, for each of these claims, Appellant asserts the Examiner failed to provide proper support that the features of the claim are well-understood, routine, or conventional and submits instead that the features are unconventional and non-routine. App. Br. 15–28.

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the Final Office Action, mailed August 25, 2017 ("Final Act."), from which this Appeal is taken.

[3] On April 19, 2018, the Deputy Commissioner for Patent Examination Policy issued a memorandum entitled: Changes in Examination Procedure Pertaining to Subject Matter Eligibility, Recent Subject Matter Eligibility Decision (*Berkheimer v. HP, Inc.*) (i.e., "the *Berkheimer* Memorandum") (discussing *Berkheimer v. HP, Inc.*, 881 F.3d 1360 (Fed. Cir. 2018)) (available at https://www.uspto.gov/sites/default/files/documents/memo-berkheimer-20180419.PDF).

The Supreme Court's two-step framework guides our analysis of patent eligibility under 35 U.S.C. § 101. *Alice Corp. v. CLS Bank Int'l*, 573 U.S. 208, 217 (2014). In addition, the Office recently published revised guidance for evaluating subject matter eligibility under 35 U.S.C. § 101, specifically with respect to applying the *Alice* framework. USPTO, 2019 Revised Patent Subject Matter Eligibility Guidance, 84 Fed. Reg. 50 (Jan. 7, 2019) ("Office Guidance"). If a claim falls within one of the statutory categories of patent eligibility (i.e., a process, machine, manufacture, or composition of matter) then the first inquiry is whether the claim is directed to one of the judicially recognized exceptions (i.e., a law of nature, a natural phenomenon, or an abstract idea). *Alice*, 573 U.S. at 217. As part of this inquiry, we must "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 Tex., LLC v. DirecTV, LLC,* 838 F.3d 1253, 1257–58 (Fed. Cir. 2016). Per Office Guidance, this first inquiry has two prongs of analysis (i) does the claim recite a judicial exception (e.g., an abstract idea), and (ii) if so, is the judicial exception integrated into a practical application. 84 Fed. Reg. at 54. Under the Office Guidance, if the judicial exception is integrated into a practical application, *see infra*, the claim passes muster under § 101. 84 Fed. Reg. at 54–55. If the claim is directed to a judicial exception (i.e., recites a judicial exception and does not integrate the exception into a practical application), the next step is to determine whether any element, or combination of elements, amounts to significantly more than the judicial exception. *Alice*, 573 U.S. at 217; 84 Fed. Reg. at 56.

Here, we conclude Appellant's claims recite an abstract idea because they recite mental processes. 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. *See Intellectual Ventures I LLC v. Symantec Corp.*, 838 F.3d 1307, 1318 (Fed. Cir. 2016) ("[W]ith the exception of generic computer-implemented steps, there is nothing in the claims themselves that foreclose them from being performed by a human, mentally or with pen and paper."); *see also CyberSource Corp. v. Retail Decisions, Inc.*, 654 F.3d 1366, 1372 (Fed. Cir. 2011) (holding that the incidental use of a "computer" or "computer readable medium" does not make a claim otherwise directed to a process that "can be performed in the human mind, or by a human using a pen and paper" patent eligible); *Mayo Collaborative Servs. v. Prometheus Labs., Inc.*, 566 U.S. 66, 71 (2012) (explaining mental processes are not patentable); 84 Fed. Reg. at 52–53 nn.14–15.

More specifically, Appellant's claims are directed to scheduling of available assets based on a desired metric. This is consistent with how Appellant describes the claimed invention. *See* Spec. ¶ 2, Abstract (describing use of location tracking of assets to support decision processes related to the management of multiple assets). Determining which assets are available based on their location, and scheduling certain assets for assignment based on a desired metric can be performed by a human, mentally or with pen and paper. Consistent with our Office Guidance and case law, we conclude that scheduling of available assets based on a desired metric is a mental process and, thus, an abstract idea. *See* 84 Fed. Reg. at

52; *see also Elec. Power Grp., LLC v. Alstom S.A.*, 830 F.3d 1350, 1354 (Fed. Cir. 2016) (concluding that "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"); *CyberSource*, 654 F.3d at 1371–72 (concluding claims directed to "detecting credit card fraud based on information relating [to] past transactions" can be performed in the human mind and were drawn to a patent-ineligible mental process); *FairWarning IP, LLC v. Iatric Sys., Inc.*, 839 F.3d 1089, 1093–94 (Fed. Cir. 2016) (concluding claims directed to "collecting and analyzing information to detect misuse and notifying a user when misuse is detected" to be mental processes within the abstract-idea category); *Voter Verified, Inc. v. Election Sys. & Software LLC*, 887 F.3d 1376, 1385–86 (explaining the concepts of voting, verifying the vote, and submitting the vote for tabulation to be abstract). Additionally, we note that using a computer to perform tasks more quickly or efficiently does not confer patent eligibility on an otherwise ineligible abstract idea. *See, e.g.*, *Bancorp Servs., LLC v. Sun Life Assurance Co. of Can. (U.S.)*, 687 F.3d 1266, 1278 (Fed. Cir. 2012) ("[T]he fact that the required calculations could be performed more efficiently via a computer does not materially alter the patent eligibility of the claimed subject matter.").

Claim 35 is reproduced below and includes the following claim limitations that recite scheduling of available assets based on a desired metric, emphasized in *italics*:

> 35. A method, comprising:
>
> receiving, by an operations center from a user computing device, an identification of a plurality of customer defined landmark areas, wherein each of the plurality of customer

> defined landmark areas is associated with a separate geographic area;
>
> *receiving*, by the operations center, *position reports from each of a plurality of assets*;
>
> *tracking*, by the operation center based on the received position reports, *an entry by some of the plurality of assets into a first of the plurality of customer defined landmark areas and an exit by some of the plurality of assets out of the first of the plurality of customer defined landmark areas, the tracking of the entry and the exit producing a current pool of assets at the first of the plurality of customer defined landmark areas,* the current pool of assets comprising those of the plurality of assets that have entered, but not yet exited, the first of the plurality of customer defined landmark areas;
>
> *determining*, by the operations center *based on the received position reports, a ranked list of the plurality of assets in the current pool of assets based on a turn time target* that identifies a target amount of time between an entry and an exit of an asset from the first of the plurality of customer defined landmark areas; and
>
> *transmitting*, by the operations center, *the ranked list to a load planner system via a communication network, the ranked list causing the load planner system to transmit an assignment instruction to one or more assets selected from the ranked list*, the assignment instruction causing the one or more assets to depart from the customer defined landmark area, thereby adjusting the current pool of assets at the first of the plurality of customer defined landmark areas.

More particularly, the concept of scheduling of available assets based on a desired metric comprises (i) determining which assets are available (i.e., the claimed steps of receiving position information from the assets and tracking their position to determine if the assets are within a certain geographic area (i.e., the customer defined landmark)); (ii) ranking the available assets according to a desired metric, such as a turn time target (i.e.,

the claimed step of determining a ranked list of available assets based on a turn time target); and (iii) sending the ranked list of assets to a scheduler so that the assets may be scheduled for assignment (i.e., the claimed step of transmitting the list of available assets ranked by the turn time target to a load planner system for assignment).

Because the claim recites a judicial exception, we next determine whether the claim integrates the judicial exception into a practical application. 84 Fed. Reg. at 54. To determine whether the judicial exception is integrated into a practical application, we identify whether there are "*any additional elements recited in the claim beyond the judicial exception(s)*" and evaluate those elements to determine whether they integrate the judicial exception into a recognized practical application. 84 Fed. Reg. at 54–55 (emphasis added); *see also* Manual of Patent Examining Procedure ("MPEP") § 2106.05(a)–(c), (e)–(h) (9th ed. Rev. 08.2017, Jan. 2018).

Here, we find the additional limitation(s) do not integrate the judicial exception into a practical application. More particularly, the claims do not recite (i) an improvement to the functionality of a computer or other technology or technical field (*see* MPEP § 2106.05(a)); (ii) a "particular machine" to apply or use the judicial exception (*see* MPEP § 2106.05(b)); (iii) a particular transformation of an article to a different thing or state (*see* MPEP § 2106.05(c)); or (iv) any other meaningful limitation (*see* MPEP § 2106.05(e)). *See* 84 Fed. Reg. at 55.

Rather, the additional limitations merely refine elements of the abstract idea (e.g., defining the current pool of assets or a turn time target) or recite receiving an identification of customer defined areas, which are used

in determining the claimed current pool of assets (i.e., assets located within the customer defined landmark areas). Similarly the additional limitations recited in the dependent claims merely refine aspects of the abstract idea. For example, dependent claims 36 and 37 recite considerations when determining the ranked list; dependent claims 38 and 40 merely describe information contained within position reports (i.e., arrival and departure times of assets); and dependent claims 39 and 41 define the source of arrival and departure times as being the result of analyzing motion-sensor data.

Gathering of data as input for further processing is the type of extra-solution activity (i.e., in addition to the judicial exception) the courts have determined insufficient to transform judicially excepted subject matter into a patent-eligible application. *See* MPEP § 2106.05(g); *see also Bilski v. Kappos*, 561 U.S. 593, 612 (2010) (holding the use of well-known techniques to establish inputs to the abstract idea as extra-solution activity that fails to make the underlying concept patent eligible); *Elec. Power*, 830 F.3d at 1355 (explaining that "selecting information, by content or source, for collection analysis, and display does nothing significant to differentiate a process from ordinary mental processes"). Further, the generic recitation that the steps are performed by the "operation center," a "user computing device," or a "load planner system" does not integrate the judicial exception into a practical application.

Contrary to Appellant's assertions (*see* App. Br. 11–12), causing one or more of the assets to depart from the landmark area, thereby adjusting the current pool of available assets, is not a transformation that confers patent eligibility to the instant claims. "[T]ransformation and reduction of an article 'to a different state or thing' is the clue to patentability of a process

claim that does not include particular machines." *Bilski*, 561 U.S. at 604 (quoting *Gottschalk v. Benson*, 409 U.S. 63, 70 (1972)); *see also* MPEP § 2106.05(c). Here, there is no transformation of the assets. Instead, as the Examiner explains (*see* Ans. 8), causing one or more assets to depart a landmark area (and resulting in an adjustment to the current pool of assets in the landmark area) describes an intended result and is simply an application of the assignment instruction—an extra-solution activity. *See* MPEP § 2106.05(g); *cf. Diamond v. Diehr*, 450 U.S. 175, 184 (1981) (describing the "transformation of an article, in this case raw, uncured synthetic rubber, into a different state").

For at least the foregoing reasons, the claims do not integrate the judicial exception into a practical application.

Because we determine the claims are directed to an abstract idea or combination of abstract ideas, we analyze the claims under step two of *Alice* to determine if there are additional limitations that individually, or as an ordered combination, ensure the claims amount to "significantly more" than the abstract idea. *Alice*, 573 U.S. at 217–18 (citing *Mayo*, 566 U.S. at 77–79). As stated in the Office Guidance, many of the considerations to determine whether the claims amount to "significantly more" under step two of the *Alice* framework are already considered as part of determining whether the judicial exception has been integrated into a practical application. 84 Fed. Reg. at 56. Thus, at this point of our analysis, we determine if the claims add a specific limitation, or combination of limitations, that is not well-understood, routine, conventional activity in the field, or simply append well-understood, routine, conventional activities at a high level of generality. 84 Fed. Reg. at 56. "Whether something is well-

understood, routine, and conventional to a skilled artisan at the time of the patent is a factual determination." *Berkheimer*, 881 F.3d at 1369.

Here, Appellant's claims do not recite specific limitations (or a combination of limitations) that are not well-understood, routine, and conventional. As the Examiner finds, our reviewing court has recognized that receiving, processing, and storing data; electronic recordkeeping; and receiving or transmitting data over a network are well-understood, routine and conventional activities. Final Act. 7–8; Ans. 8. Consistent with the *Berkheimer* Memorandum,[4] we agree with the Examiner's findings that the claims merely recite generic computer components (e.g., a computing device comprising a processor and memory) performing generic computing functions that are well-understood, routine, and conventional (e.g., receiving and transmitting data, processing data, and presenting the results of the data processing). *See Mortgage Grader, Inc. v. First Choice Loan Servs. Inc.*, 811 F.3d 1314, 1324–25 (Fed. Cir. 2016) (generic computer components, such as an "interface," "network," and "database," fail to satisfy the inventive concept requirement); *Alice*, 573 U.S. at 226 ("Nearly every computer will include a 'communications controller' and a 'data storage unit' capable of performing the basic calculation, storage, and transmission functions required by the method claims."); *buySAFE, Inc. v. Google, Inc.*, 765 F.3d 1350, 1355 (Fed. Cir. 2014) ("That a computer receives and sends the information over a network—with no further specification—is not even arguably inventive."); *I/P Engine, Inc. v. AOL Inc.*, 576 F. App'x 982, 986

[4] *See Berkheimer* Memorandum 3–4 (explaining that sufficient support for a finding that an element was well-understood, routine, or conventional may be shown by citation to one or more court decisions noting the well-understood, routine, conventional nature of the element(s)).

(Fed. Cir. 2014) ("search engines, content-based filtering, and collaborative filtering were all well-known in the art").

For the reasons discussed *supra*, we are unpersuaded of Examiner error. Accordingly, we sustain the Examiner's rejection of claims 35–54 under 35 U.S.C. § 101.

DECISION

Claims Rejected	Basis	Affirmed	Reversed
35–54	35 U.S.C. § 101	35–54	
Overall Outcome		35–54	

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. § 41.50(f).

AFFIRMED