UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
14/221,415	03/21/2014	Paul Wiley	14011002.001	4219

68820 7590 02/15/2019

Frisina, LLC
4600 Euclid Ave. Suite 420
Cleveland, OH 44103

EXAMINER
REICHERT, RACHELLE LEIGH

ART UNIT	PAPER NUMBER
3686	

NOTIFICATION DATE	DELIVERY MODE
02/15/2019	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

dominic@FrisinaIP.com
assistant@FrisinaIP.com

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

Ex parte PAUL WILEY, MATTHEW LEVINE, and AARON LLOYD

Appeal 2018-000658
Application 14/221,415[1]
Technology Center 3600

Before STEPHEN C. SIU, DAVID M. KOHUT, and
JAMES W. DEJMEK, *Administrative Patent Judges*.

DEJMEK, *Administrative Patent Judge*.

DECISION ON APPEAL

Appellants appeal under 35 U.S.C. § 134(a) from a Final Rejection of claims 1–17. We have jurisdiction over the pending claims under 35 U.S.C. § 6(b).

We affirm.

---

[1] Appellants identify the real party in interest as Opargo, LLC. Br. 3.

STATEMENT OF THE CASE

Introduction

Appellants' disclosed and claimed invention generally relates to "scheduling patients in a medical practice." Spec. ¶ 1. More specifically, in a disclosed embodiment, scoring parameters are used to calculate a patient score for each patient. Spec. ¶ 27. Patients are prioritized and ranked (i.e., assigned a patient bucket) based on the calculated patient scores. Spec. ¶ 27. Appointment times with a healthcare provider are divided into time ranges which may be associated with a set of rules governing, for example, the allowed proportion of patients from each patient bucket. Spec. ¶ 27. Patients are assigned a time range consistent with the proportioning rules associated with the time range. Spec. ¶ 27. According to the Specification, specific scoring parameters may differ from one embodiment to another and may include quantitative and/or qualitative data. Spec. ¶ 28. Appellants set forth exemplary scoring parameters such as: (i) the patient bucket to which the patient has been assigned; (ii) whether the patient is a new or existing patient; and (iii) the urgency of the requested medical care. Spec. ¶ 28.

Claim 1 is representative of the subject matter on appeal and is reproduced below with the disputed limitations emphasized in *italics*:

> 1. A process for scheduling patients in a medical practice to achieve a set of predetermined scheduling goals of the practice, comprising the steps of:
>
> *collecting a set of scoring parameters for scoring a patient*;
>
> assigning a numerical quantity to each scoring parameter according to a set of predetermined scoring rules;
>
> *calculating a patient score as an average of the scoring parameters*;

> *defining a set of patient score ranges, each range comprising a patient bucket*;
>
> *assigning the scored patient to a patient bucket according to the patient's score*;
>
> dividing available appointments into time ranges measured relative to the present time, wherein each time range is associated with a set of rules governing the allowed percentage of patients from each patient bucket; and
>
> *assigning the scored patient to an appointment* without violating any rules governing the allowed percentage of patients from each patient bucket.

The Examiner's Rejections

1. Claims 1–17 stand rejected under 35 U.S.C. § 101 as being directed to patent-ineligible subject matter. Final Act. 2–5.

2. Claims 1–5, 8, and 15 stand rejected under 35 U.S.C. § 103 as unpatentable over Vaccaro et al. (US 2013/0096934 A1; Apr. 18, 2013) ("Vaccaro"); Wachtell et al. (US 2010/0312581 A1; Dec. 9, 2010) ("Wachtell"); Abraham-Fuchs (US 2005/0182663 A1; Aug. 18, 2005) ("Abraham-Fuchs"); Larsen et al. (US 2006/0047554 A1; Mar. 2, 2006) ("Larsen"); and Chiu et al. (US 2013/0197942 A1; Aug. 1, 2013) ("Chiu"). Final Act. 5–12 and 20–21.

3. Claims 6 and 9 stand rejected under 35 U.S.C. § 103 as unpatentable over Vaccaro, Wachtell, Abraham-Fuchs, Larsen, Chiu, and Amberg et al. (US 2012/0173259 A1; July 5, 2012) ("Amberg"). Final Act. 12–13.

4. Claims 7 and 10 stand rejected under 35 U.S.C. § 103 as unpatentable over Vaccaro, Wachtell, Abraham-Fuchs, Larsen, Chiu, and

Prasad et al. (US 2014/0297318 A1; Oct. 2, 2014) ("Prasad"). Final Act. 13–15.

5. Claims 11 and 17 stand rejected under 35 U.S.C. § 103 as unpatentable over Vaccaro, Wachtell, Larsen, and Chiu. Final Act. 15–18.

6. Claims 12–14 and 16 stand rejected under 35 U.S.C. § 103 as unpatentable over Vaccaro, Wachtell, Larsen, Chiu, and Wilkerson et al. (US 2014/0100866 A1; Apr. 10, 2014) ("Wilkerson"). Final Act. 18–20.

ANALYSIS[2]

Rejection under 35 U.S.C. § 101

Appellants dispute the Examiner's conclusion that the pending claims are directed to patent-ineligible subject matter. Br. 10–13. In particular, Appellants argue the Examiner failed to consider the claims as written (i.e., the Examiner "has improperly rewritten the claim elements") and as a whole in determining the claims are directed to a judicial exception. Br. 11–12. Appellants assert the claimed invention is not directed to an abstract idea (e.g., a fundamental economic practice, a method of organizing human activity or a mathematical formula), but is instead directed to "a concrete scheduling method and machine." Br. 11–12. Moreover, Appellants assert the claims recite "significantly more" than the alleged abstract idea. Br. 12.

[2] Throughout this Decision, we have considered the Appeal Brief, filed June 12, 2017 ("Br."); the Examiner's Answer, mailed August 10, 2017 ("Ans."); and the Final Office Action, mailed October 11, 2016 ("Final Act."), from which this Appeal is taken. Appellants did not file a Reply Brief. To the extent Appellants have not advanced separate, substantive arguments for particular claims or issues, such arguments are considered waived. *See* 37 C.F.R. § 41.37(c)(1)(iv) (2016).

Appellants argue the claims provide "a technological improvement to the technical problem of computerized patient scheduling." Br. 12.

The Supreme Court's two-step framework guides our analysis of patent eligibility under 35 U.S.C. § 101. *Alice Corp. Pty. Ltd. 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's 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) (internal citations omitted). 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. Office Guidance 54. Under the Office Guidance, if the judicial exception is integrated into a practical application, *see infra*, the claim passes muster under § 101. Office Guidance 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; Office Guidance 56.

Here, Appellants' claims are generally directed to scheduling patients based on scoring parameters. This is consistent with how Appellants describe the claimed invention. *See* Br. 11–12 (describing the claims as being directed to a "scheduling method"). Scheduling patients based on scoring parameters is a method of organizing human activities (i.e., managing relationships or interactions between people)—i.e., an abstract idea. *See* Office Guidance 52; *see also Intellectual Ventures I LLC v. Capital One Bank (USA)*, 792 F.3d 1363, 1367 (Fed. Cir. 2015) (deeming the claim at issue "not meaningfully different from the ideas found to be abstract in other cases before the Supreme Court and our court involving methods of organizing human activity").

Claim 1, reproduced below, identifies the claim limitations that recite the identified judicial exception in *italics*.

> 1. A process for scheduling patients in a medical practice to achieve a set of predetermined scheduling goals of the practice, comprising the steps of:
>
> *collecting a set of scoring parameters for scoring a patient;*
>
> *assigning a numerical quantity to each scoring parameter according to a set of predetermined scoring rules;*
>
> *calculating a patient score as an average of the scoring parameters;*
>
> *defining a set of patient score ranges, each range comprising a patient bucket;*
>
> *assigning the scored patient to a patient bucket according to the patient's score;*

> *dividing available appointments into time ranges measured relative to the present time, wherein each time range is associated with a set of rules governing the allowed percentage of patients from each patient bucket; and*
>
> *assigning the scored patient to an appointment without violating any rules governing the allowed percentage of patients from each patient bucket.*

Because the claim recites a judicial exception, we next determine whether the claim integrates the judicial exception into a practical application. Office Guidance 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. Office Guidance 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, there are no additional limitations recited beyond the judicial exception itself to integrate the exception into a practical application. Similarly, the additional limitations recited in the dependent claims fail to 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) use 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 also* Office Guidance 55. Rather, the additional limitations amount to extra-solution

activity (*see, e.g.*, claim 2 adding a means to override the process, and claims 3, 4, and 5 further adding prioritization of patients). *See* MPEP § 2106.05(g). Thus, 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 Collaborative Servs. v. Prometheus Labs., Inc.*, 566 U.S. 66, 72–73, 77–79 (2012)). 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. Office Guidance 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 appends well-understood, routine, conventional activities at a high level of generality. Office Guidance 56.

Here, Appellants claims do not recite specific limitations (or a combination of limitations) that are not well-understood, routine, and conventional. For example, independent claim 11 recites a system for performing the judicial exception comprising "a local general purpose computer workstation" and "a remote computer system." These components are described at a high level of generality and do not perform activities beyond those that are well-understood, routine, and conventional. *See* Spec.

¶ 47, Figs. 3A, 3B; *see also Alice*, 573 U.S. at 226 at 2360 ("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."); *Content Extraction & Transmission v. Wells Fargo Bank, N.A.*, 776 F.3d 1343, 1347–48 (Fed. Cir. 2014) ("storing information" into memory insufficient confer patent eligibility); *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); *Intellectual Ventures I,* 792 F.3d at 1368 (a "database" and "a communication medium" "are all generic computer elements"); *buySAFE 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.").

Additionally, to the extent Appellants contend the claims do not seek to tie-up an abstract idea (Br. 13), we are unpersuaded of Examiner error. "'[W]hile preemption may signal patent ineligible subject matter, the absence of complete preemption does not demonstrate patent eligibility.'" *FairWarning IP*, 839 F.3d at 1098 (quoting *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."). Further, "[w]here 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*, 788 F.3d at 1379.

For the reasons discussed *supra*, we are unpersuaded of Examiner error. Accordingly, we sustain the Examiner's rejection of claims 1–17 under 35 U.S.C. § 101.

Rejections under 35 U.S.C. § 103

Appellants argue Vaccaro, as relied upon by the Examiner, fails to teach the various claim limitations for which it is cited. Br. 13–15. We address Appellants' arguments *seriatim*, but first provide a brief overview of Vaccaro.

Vaccaro generally relates to a "percolator systems . . . for identifying and prioritizing at-risk members for outreach efforts." Vaccaro ¶ 2. Vaccaro discloses that percolator systems may be used "to identify individuals who have complex health conditions and are receiving and utilizing healthcare resources sub-optimally." Vaccaro ¶ 5. Vaccaro states the disclosed percolator system serves three main functions:

> (1) stratifying and assigning risk scores to members for the client; (2) ranking the priority of members and their issues that need to be addressed for each individual member associated with the client; and (3) driving workflow by assigning identified members to the most appropriate staff member and prioritizing activities for the staff.

Vaccaro ¶ 6. Vaccaro describes a data management unit that provides data about members to the percolator system. Vaccaro ¶ 26. Such data may be provided by external sources or monitored and provided to the system. Vaccaro ¶ 27. Additionally, Vaccaro teaches a rules database may comprise rules, business rules, business rule sets, triggers, and/or trigger weights.

Vaccaro ¶ 28. A trigger may be a combination of business rule sets and a business rule set may be a combination of business rules. Vaccaro ¶ 29. Moreover, a business rule may be one or more questions used to evaluate a member. Vaccaro ¶ 32. Vaccaro teaches a business rule may be used to examine a member's healthcare background, present healthcare, or ability to obtain healthcare. Vaccaro ¶ 32. An outreach score is determined for each member based, at least in part, on the triggers. Vaccaro ¶ 24. Further, Vaccaro teaches a risk-evaluation unit that may apply one or more triggers from the rules database to member data to assign an acuity level, or risk level to the member. Vaccaro ¶¶ 34–35. A risk score may be a sum or other combination of the determined risks. Vaccaro ¶ 36. Members are ranked according to their risks and acuity levels assigned based on the rankings. Vaccaro ¶¶ 41–42. "Using the outreach scores and acuity levels, the percolator system . . . may output a workflow . . . instructing outreach staff as to which members should be reaches and for what purpose." Vaccaro ¶ 57, *see also* Vaccaro ¶ 17 ("Based on an assigned acuity level the percolator system may determine a type of outreach, frequency, and type of staff."). An example of outreach may be a face to face encounter. Vaccaro ¶ 17.

Appellants assert Vaccaro does not teach "collecting a set of scoring parameters for scoring a patient." Br. 13. Appellants contend the scoring parameters "are data elements that relate to scheduling patients in a manner that optimizes a physician's schedule" and that they are different than Vaccaro's triggers and business rules. Br. 13–14.

The Examiner finds Vaccaro teaches collecting a set of scoring parameters to score a patient. *See* Final Act. 6 (citing Vaccaro ¶¶ 28–29);

Ans. 4–5. In particular, the Examiner finds Vaccaro's business rules account for various factors in determining a patient's score and, therefore, correspond to the claimed scoring parameters. Ans. 4–5.

We are mindful that limitations are not to be read into the claims from the specification. *In re Van Geuns*, 988 F.2d 1181, 1184 (Fed. Cir. 1993). However, claims are to be given their broadest reasonable interpretation consistent with the specification, reading claim language in light of the specification as it would be interpreted by one of ordinary skill in the art. *In re Am. Acad. of Sci. Tech. Ctr.*, 367 F.3d 1359, 1364 (Fed. Cir. 2004).

In the Specification, Appellants set forth "an exemplary and non-limiting list" of scoring parameters. Spec. ¶ 28. Included among the examples are whether the patient is a new or existing patient, the patient bucket to which the patient is assigned, and the urgency of the requested care. *See* Spec. ¶ 28. As described above, Vaccaro teaches the disclosed business rules may be used to evaluate a member including, for example, a member's present healthcare (i.e., a new or existing patient/member). Vaccaro ¶ 32. Further, Vaccaro teaches the business rules (as part of triggers) may be used to determine a member's outreach and risk scores. Accordingly, we agree with the Examiner that Vaccaro teaches collecting a set of scoring parameters for scoring a patient.

As recited in the claim (e.g., claim 1) a patient score is calculated as an average of the scoring parameters. Appellants assert that because Vaccaro does not teach the claimed scoring parameters, it cannot teach calculating a patient score from scoring parameters. Br. 14.

For reasons discussed above, we agree with the Examiner that Vaccaro teaches scoring parameters. Further, the Examiner finds, and

Appellants do not persuasively rebut, Vaccaro teaches calculating a patient outreach score based on the application of the rules engine (comprising the business rules). Ans. 5–6 (citing Vaccaro ¶ 23). Although Vaccaro does not expressly state the calculation involves averaging values to determine the patient's score, the Examiner finds Abraham-Fuchs teaches a patient score being an average of various parameters. Ans. 5–6 (citing Abraham-Fuchs ¶ 44).

Appellants also assert Vaccaro fails to teach defining a set of patient range scores, where each range comprises a patient bucket. Br. 14. In particular, Appellants argue Vaccaro teaches ranking members according to a risk score, which Appellants contend is unrelated to the claimed patient scores. Br. 14.

We disagree. The Examiner finds Vaccaro teaches assigning an acuity level to each member based on the patient scores. Ans. 6 (citing Vaccaro ¶¶ 40–42). Further, the Examiner finds, and we agree, Vaccaro teaches categorizing members (i.e., patients) into different groups based on the scores. Ans. 6 (citing Vaccaro ¶¶ 23, 42, 49–50, Fig. 3). For example, Vaccaro teaches "acuity levels may be based on the percentiles within risk score rankings." Vaccaro ¶ 42; Ans. 6. Additionally, Vaccaro teaches various groupings (i.e., patient buckets)—e.g., "VERY HIGH RISK" or "MEDIUM RISK"—for the ranges of acuity levels within the risk score rankings. Ans. 6; Vaccaro, Fig. 3.

Appellants assert Vaccaro also fails to teach assigning a scored patient to a patient bucket according to the patient's score because Vaccaro's risk scores are unrelated to the claimed patient scores. Br. 14.

As the Examiner explains, and we agree, assigning members (i.e., patients) into risk groups corresponds to assigning patients to patient buckets as claimed. Ans. 6. Contrary to Appellants' assertions, Vaccaro's risk scores are not unrelated to a patient score. As the Examiner notes, in the Specification, Appellants identify the urgency of care and a scoring parameter (thereby contributing to the patient score). Ans. 6 (citing Spec. ¶ 28). The urgency of care includes a patient's risk. Ans. 6.

Lastly, Appellants argue Vaccaro is silent about setting appointments and, therefore, does not teach assigning a scored patient to an appointment. Br. 14–15.

The Examiner finds, and we agree, Vaccaro's teaching of various types of outreach with a member, including face-to-face encounters and telephone communications, corresponds to the claimed appointments. Ans. 7 (citing Vaccaro ¶ 17).

For the reasons discussed *supra*, we are unpersuaded of Examiner error. Accordingly, we sustain the Examiner's rejection under 35 U.S.C. § 103 of independent claim 1. For similar reasons, we also sustain the Examiner's rejections of independent claims 8 and 11, which recite similar limitations and were not argued separately. *See* Br. 15; *see also* 37 C.F.R. § 41.37(c)(1)(iv). Further, we sustain the Examiner's rejections of claims 2–7, 9, 10, and 12–17, which depend therefrom and were not argued separately. *See* Br. 15; *see also* 37 C.F.R. § 41.37(c)(1)(iv).

DECISION

We affirm the Examiner's decision rejecting claims 1–17 under 35 U.S.C. § 101.

We affirm the Examiner's decision rejecting claims 1–17 under 35 U.S.C. § 103.

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). *See* 37 C.F.R. § 1.136(a)(1)(iv).

AFFIRMED