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UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

Ex parte CHRISTINE HENDERSON, LUCY THOMPSON, and
DAVID T. SHARBAUGH

Appeal 2016-008733
Application 12/648,343
Technology Center 3600

Before THU A. DANG, LARRY J. HUME, and JAMES W. DEJMEK,
Administrative Patent Judges.

DANG, *Administrative Patent Judge.*

DECISION ON APPEAL

Appellants¹ appeal under 35 U.S.C. § 134(a) from the Examiner's Final Rejection of claims 1, 2, 5–10, 21, and 23–26, which constitute all claims pending in the application. Claims 3, 4, 11–20, and 22 were previously canceled.² We have jurisdiction under 35 U.S.C. § 6(b).

We AFFIRM.

¹ The real party in interest is Teletracking Technologies, Inc. App. Br. 3.

² Although the Examiner rejects claim 22 in the Final Rejection (Final Act. 2), claim 22 was previously canceled and is not pending in the application.

STATEMENT OF THE CASE

According to Appellants, the claimed invention relates to “systems and methods for monitoring patient conditions and history and issuing notifications based on such monitoring.” Spec. ¶ 2.

Claim 1, illustrative of the invention and the subject matter of the appeal, reads as follows:

1. A method comprising:
 - receiving patient specific data comprising room location of a patient within a healthcare facility, at least one care provider having contact with the patient in the room location, and information regarding the condition of the patient in the room;
 - storing the patient specific data in a repository, the repository storing reference data including historical patient information derived from an electronic medical record;
 - using a processor to compare patient specific data with the reference data to detect clinical patterns and to identify an alert situation;
 - producing one or more alerts when the processor identifies a clinical pattern using the patient specific information and the reference data indicating an alert situation;
 - sending the one or more alerts to an alert repository;
 - storing the one or more alerts in the alert repository as one or more historical alerts for inclusion with the reference information;
 - sending the one or more alerts to a patient screen located in the room occupied by the patient and accessible to the at least one care provider;
 - providing a score to at least one alert situation identified;
 - prioritizing care provider tasks displayed in the patient screen to dynamically change one or more of a workload and an assignment based on the score; and
 - as the at least one care provider enters the room, displaying on the patient screen located in the room current tasks for the at least one care provider and patient specific information for the patient in the room.

The Rejections on Appeal

1. Claims 1, 2, 5–10, 21, and 23–26 stand rejected under 35 U.S.C. § 101 as being directed to patent-ineligible subject matter. Final Act. 2–4.
2. Claims 1, 2, 5–10, 21, and 23–25 stand rejected under 35 U.S.C. § 112, first paragraph, as failing to comply with the written description requirement. Final Act. 4–5.
3. Claims 1, 2, 6–10, 21, and 23–25 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Collins et al. (US 2006/0049936 A1, published Mar. 9, 2006) (hereinafter “Collins”); Reisman et al. (US 2009/0216558 A1, published Aug. 27, 2009) (hereinafter “Reisman”); and Zerhusen et al. (US 2003/0052787 A1, published Mar. 20, 2003) (hereinafter “Zerhusen”). Final Act. 6–17.
4. Claim 5 stands rejected under 35 U.S.C. § 103(a) as being unpatentable over Collins, Reisman, Zerhusen, and Rapaport et al. (US 2006/0161457 A1, published July 20, 2006) (hereinafter “Rapaport”). Final Act. 17–19.
5. Claim 26 stands rejected under 35 U.S.C. § 103(a) as being unpatentable over Zerhusen and Matz (US 2004/0262377 A1, published Dec. 30, 2004). Final Act. 19–21.

ISSUES

The principal issues before us are whether the Examiner erred in determining:

1. The claimed method comprising the steps of: “receiving,” “storing,” “using a processor to compare,” “producing,” “sending,” “providing,” and “displaying” various forms of data, and prioritizing tasks based on the data (claim 1) is directed to patent-ineligible subject matter.

2. The limitation, “storing the patient specific data in a repository, . . . including historical patient information derived from an electronic medical record,” was not described in the Specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

3. The combination of Collins, Reisman, and Zerhusen teaches or suggests “providing a score to at least one alert situation,” “prioritizing care provider tasks . . . based on the score,” and “as the at least one care provider enters the room, displaying on the patient screen . . . current tasks for the at least one care provider and patient specific information for the patient.”

App. Br. 24–25.

FINDINGS OF FACT

The following Findings of Fact (FF) are shown by a preponderance of the evidence.

Collins

1. Collins discloses a system for monitoring hospital beds (Abst.), wherein patient information such as patient’s name, whether the patient is a fall risk, whether the patient is being restrained, and other notes about the patient or the patient’s conditions is displayed. ¶ 9. A Call Management screen is provided that shows the alarm condition for each patient. ¶ 69. Upon detecting an alarm condition, calls are placed from the rooms in which an alarm condition are detected, prioritized ahead of calls from rooms where no alarm condition exists. ¶ 71. Alarms are designated as having either high, normal, or low priority, wherein high priority alarms are listed in the window ahead of those having normal or low priority. *Id.*

Reisman

2. Reisman discloses a system for generating real-time health care alerts that delivers alerts based on comparison of evidence-based standards of care to information related to the patient's actual care. Abst. Customized alerts are provided to an individual patient via a personal health record, wherein the health care organization collects medical care information, aggregates it in the medical database, establishes a set of clinical rules for a plurality of conditions. ¶ 46. The rules engine module stores an alert indicator in the patient's medical data file within the medical database, including the associated alert detail. *Id.*

The rules engine module generates a real-time risk score for various medical conditions. ¶ 67. The clinician uses a disease management application/program to calculate the patient's risk score before and after a disease management interaction with the patient in order to assess progress, which allows the physical to review the high risk factors in the patients' health regimen with the patient during an office visit and to identify patients requiring future disease management sessions. *Id.* The rules engine module then generates a plurality of clinical alerts, each corresponding to a specific alert or recommendation identified by an alert number. ¶ 70. When the health care provider logs into the application, the provider is presented with a list of patients organized by present condition along with approximate risk score associated with each patient population group, such as high, moderate and low risk diabetics, such that the provider can prioritize high risk patients, determine frequency of follow-up visits, use information to feed the advanced medical home and identify patients for future disease management sessions. ¶ 78.

Zerhusen

3. Zerhusen discloses patient point-of-care computer system, wherein patient data is stored in a memory in a main server coupled to the computer by a communication network. ¶ 5. A personnel locating and tracking system identifies a nurse when the nurse enters the room of the patient requiring medication and the system responds by posting a message to the nurse that is displayed when the nurse is detected, the message includes delivery information relating to the ordered medication. ¶ 171. Once the nurse picks up the medication, the nurse clears the associated entry on the nurse's to-do list. *Id.*

ANALYSIS

We have reviewed the Examiner's rejections in light of Appellants' arguments presented in this appeal. Arguments which Appellants could have made, but did not make in the Briefs are deemed to be waived. *See* 37 C.F.R. § 41.37(c)(1)(iv)(2015). On the record before us, we are not persuaded the Examiner has erred. Unless otherwise indicated, we adopt as our own the findings and reasons set forth in the rejections from which the appeal is taken and in the Examiner's Answer, and provide the following for highlighting and emphasis.

Rejection Under 35 U.S.C. § 101

Appellants argue the Examiner erred in concluding the claims constitute patent-ineligible subject matter. App. Br. 11–17.³ In particular,

³ Appellants do not provide substantive arguments for claims 2, 5–10, 21, and 23–26 separate from those of claim 1 (App. Br. 13–17), and thus, we choose claim 1 as representative of the group. 37 C.F.R. § 41.37(c)(1)(iv).

with respect to claim 1, Appellants contend the claims, “properly construed, are directed to technological improvements to patient at a glance technology.” *Id.* at 13. According to Appellants, “there is clearly no risk that the claims will ‘tie up’ the subject matter of ‘organizing human activities.’” *Id.* Appellants direct our attention to *DDR Holdings*, which held “the claimed solution is necessarily rooted in computer technology.” *Id.* at 13–14, citing *DDR Holdings, LLC v. Hotels.com, L.P.*, 773 F.3d 1245, 1259 (Fed. Cir. 2014). According to Appellants, like *DDR Holdings*, Appellants’ specific solution “involves novel programming of the monitoring system to permit a specific alerting technique to be employed.” *Id.*

Based on the record before us, we are not persuaded of Examiner error.

Under 35 U.S.C. § 101, the Supreme Court has long interpreted the statute to include an implicit exception: “[l]aws of nature, natural phenomena, and abstract ideas” are not patentable. *See, e.g., Alice Corp. Pty. Ltd. v. CLS Bank Int’l*, 134 S. Ct. 2347, 2354 (2014). The Supreme Court, in *Alice*, reiterated the two-step framework previously set forth in *Mayo Collaborative Services v. Prometheus Laboratories, Inc.*, 566 U.S. 66, 75–77 (2012), “for distinguishing patents that claim laws of nature, natural phenomena, and abstract ideas from those that claim patent-eligible applications of those concepts.” *Alice*, 134 S. Ct. at 2355. The first step is to “determine whether the claims at issue are directed to one of those patent-ineligible concepts,” such as an abstract idea, as the Examiner concludes in this case. If the claims are not directed to an abstract idea, the inquiry ends. Otherwise, the inquiry proceeds to the second step where the elements of the

claims are considered “individually and ‘as an ordered combination’” 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 (quoting *Mayo*, 566 U.S. at 79, 78).

In the present application, representative claim 1 merely recites the steps of “receiving,” “storing,” “using a processor to compare,” “producing,” “sending,” “providing,” and “displaying” various forms of data, and prioritizing tasks based on the data. That is, claim 1 is directed to a method of collecting, analyzing, and displaying various forms of data for a health care provider to perform tasks (claim 1).

In this regard, the claims are similar to the claims that the Federal Circuit determined are patent-ineligible in *Elec. Power Grp., LLC v. Alstom S.A.*, 830 F.3d 1350, 1353 (Fed. Cir. 2016) (holding that “collecting information, analyzing it, and displaying certain results of the collection and analysis” are “a familiar class of claims ‘directed to’ a patent-ineligible concept”); *In re TLI Commc’ns LLC Patent Litig.*, 823 F.3d 607, 611 (Fed. Cir. 2016); *FairWarning IP, LLC v. Iatric Sys., Inc.*, 839 F.3d 1089, 1093–94 (Fed. Cir. 2016). We further refer to *Content Extraction*, where the Federal Circuit has provided additional guidance on the issue of statutory subject matter by holding claims to collecting data, recognizing certain data within the collected data set, and storing that recognized data in memory were directed to an abstract idea and therefore unpatentable under § 101. *Content Extraction & Transmission LLC v. Wells Fargo Bank, N.A.*, 776 F.3d 1343 (Fed. Cir. 2014).

Furthermore, we also agree with the Examiner that prioritizing tasks for the health care provider is an example of organizing human activities.

Final Act. 3. The performance of basic human activities that have been performed for years. *See CyberSource Corp. v. Retail Decisions, Inc.*, 654 F.3d 1366, 1375 (Fed. Cir. 2011) (“That purely mental processes can be unpatentable, even when performed by a computer, was precisely the holding of the Supreme Court in *Gottschalk v. Benson*.”).

On this record, we conclude claim 1 is directed to an abstract idea under step one of *Alice*.

As to step two of the analysis under *Alice*, although Appellants contend the claims, “properly construed, are directed to technological improvements to patient at a glance technology” (App. Br. 13) “the relevant question is whether the claims here do more than simply instruct the practitioner to implement the abstract idea . . . on a generic computer.” *Alice*, 134 S. Ct. at 2359. In this case, the Examiner concludes, and we agree, “the method claims recite the abstract idea implemented on a generic computer” while “the apparatus claims recite generic computer components configured to implement the same idea.” Final Act. 4. That is, the claimed steps “merely provide conventional computer implementation,” wherein “[t]here is no indication that the combination of elements improves the functioning of a computer or improves any other technology.” Ans. 5.

Here, we agree that these limitations are all generic computer functions (i.e., “receiving,” “storing,” “using a processor to compare,” “producing,” “sending,” “providing,” and “displaying” various forms of data, and prioritizing tasks based on the data) that are well-understood, routine, and conventional activities previous known to the industry. *Alice*, 134 S. Ct. at 2359; see also *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.”).

Although Appellants direct our attention to *DDR Holdings*, which held “the claimed solution is necessarily rooted in computer technology” (App. Br. 13–14), *DDR Holdings* does not support Appellants’ arguments. In *DDR Holdings*, the Federal Circuit determined that certain claims satisfied *Mayo/Alice* step two because “the claimed solution amounts to an inventive concept for resolving [a] particular Internet-centric problem,” i.e., a challenge unique to the Internet. *DDR Holdings*, 773 F.3d at 1257–59; see *Synopsys, Inc. v. Mentor Graphics Corporation*, 839 F.3d 1138, 1151 (Fed. Cir. 2016) (noting that “[i]n *DDR Holdings*, we held that claims ‘directed to systems and methods of generating a composite web page that combines certain visual elements of a ‘host’ website with content of a third-party merchant’ contained the requisite inventive concept”). The Federal Circuit explained that the patent-eligible claims specified “how interactions with the Internet are manipulated to yield a desired result . . . that overrides the routine and conventional sequence of events ordinarily triggered by the click of a hyperlink.” *DDR Holdings*, 773 F.3d at 1258. The court reasoned that those claims recited a technological solution “necessarily rooted in computer technology” that addressed a “problem specifically arising in the realm of computer networks.” *Id.* at 1257.

The claims here do not address a similar problem and do not contain a similar inventive concept as the patent-eligible claims in *DDR Holdings*. Instead, as Appellants concede, the claims are drawn to a concept of “patient at a glance technology” (App. Br. 13), but, as the Examiner finds, the claims “merely provide conventional computer implementation,” wherein “[t]here

is no indication that the combination of elements improves the functioning of a computer or improves any other technology.” Ans. 5.

For at least the aforementioned reasons, on this record, we sustain the patent-ineligible subject matter rejection under 35 U.S.C. § 101 of the claims.

35 U.S.C. § 112

The Examiner rejects the claims as failing to comply with the written description requirement. Final Act. 4–5; Ans. 6–7. However, Appellants contend “the claim language rejected under § 112 is fully described at least at original claim 18.” App. Br. 17–18 (also citing Spec. ¶ 16).

Upon review of the record, we agree with Appellants. We agree with Appellants that the Specification, and, in particular, original claim 18, does have sufficient support for “storing patient specific data in a repository” that stores “reference data including historical patient information derived from an electronic medical record,” as recited in claim 1. In particular, original claim 18 recites “an alerting agent that analyzes medical records data and searches for conditions that meet criteria in the alert repository.” Spec. 13. Further, paragraph 16 of the Specification discloses, for example, “[t]he alerting agent 500 includes software that analyzes medical records data and searches for conditions that meet the alert repository criteria,” wherein “[t]he alert repository contains both current alerts and historical alerts.” Spec. ¶ 16.

Based on the record before us, we reverse the Examiner’s rejection of all of the claims under 35 U.S.C. § 112, first paragraph.

Rejection Under Pre-AIA 35 U.S.C. § 103(a)

As for claim 1, Appellants contend “the ‘score’ Applicants’ claim is not a patient population ‘risk score’ [as set forth in Reisman] but rather

applies to ‘at least one alert situation identified,’ where ‘a processor [is used] to compare patient specific data with the reference data to detect clinical patterns and to identify an alert situation.’” App. Br. 18. According to Appellants, “Reisman is referring to a ‘risk score’ for ‘each patient population’ that is provided ‘[W]hen the health care provider 110 logs into an EMR application.’” *Id.* at 19.

Furthermore, although Appellants concede that “Zerhusen teaches that a task may be displayed on a point of care screen” (*id.* at 20), Appellants contend that Zerhusen “in no way” teaches “prioritizing care provider tasks displayed in the patient screen . . . [and] displaying on the patient screen located in the room current tasks for the at least one care provider and patient specific information for the patient in the room.” *Id.*, repeating claim 1 (emphases omitted). Additionally, according to Appellants, “the Office is using impermissible hindsight reasoning” to combine the references. *Id.*

We have considered all of Appellants’ arguments and evidence presented. However, we disagree with Appellants’ contentions regarding the Examiner’s rejections of the claims. We agree with the Examiner’s conclusion that the claims would have been *obvious* over the *combined* teachings of Collins, Reisman, and Zerhusen.

As an initial matter, we note Appellants’ contentions appear to be that Reisman and Zerhusen fail to teach the claimed invention. App. Br. 19–20. However, the test for obviousness is not what the references show individually, but what the combined teachings would have suggested to one of ordinary skill in the art. *See In re Merck & Co.*, 800 F.2d 1091, 1097 (Fed. Cir. 1986).

Here, although Appellants contend “Reisman is referring to a ‘risk score’ for ‘each patient population’ that is provided ‘[W]hen the health care provider 110 logs into an EMR application’” (App. Br. 19), while Zerhusen “in no way teaches” the contested limitation, we find that the combination of Collins, Reisman, and Zerhusen teaches or at least suggests the contested limitation recited in claim 1.

In particular, as the Examiner finds and Appellants concede, Reisman discloses providing a “risk score” to an alert situation. Final Act.8–9; App. Br. 18–19; FF 2. Further, the Examiner finds, Reisman also teaches and suggests prioritizing care provider tasks displayed to dynamically change workload and assignments. Final Act. 10; FF2. Additionally, the Examiner finds Collins also discloses “sending alerts to care provider as in fig. 18 and 19;” and “prioritizing task and monitor the situation that generated one or more alerts.” Final Act. 8 (emphasis omitted); FF 1. The Examiner also finds “Zerhusen teaches it is old and well known to communicat[e] to a patient screen located in the room occupied by the patient and accessible to the one or more care provider.” Final Act. 11 (emphasis omitted); FF3. We agree with the Examiner’s findings. Accordingly, we find that the combination of Collins, Reisman and Zerhusen teaches and suggests the contested limitation.

We are also unpersuaded by Appellants’ hindsight contentions (App. Br. 20). Here, the references are all directed to collecting, maintaining, and analyzing data relating to patient care. FF1–3. We find a skilled artisan would “be able to fit the teachings of multiple patents together like pieces of a puzzle” since the skilled artisan is “[a] person of ordinary skill is also a person of ordinary creativity, not an automaton.” *KSR Int’l Co. v. Teleflex*

Inc., 550 U.S. 398, 420–21 (2007). A rejection is proper as long as it takes into account only knowledge which was within the level of ordinary skill at the time the claimed invention was made, and does not include knowledge gleaned only from the applicant’s disclosure. *In re McLaughlin*, 443 F.2d 1392, 1395 (CCPA 1971)).

On this record, we find no error with the Examiner’s rejections of claims 1, 2, 6–10, 21, and 23–25 over Collins, Reisman, and Zerhusen; of claim 5 over Collins, Reisman, and Zerhusen, in further view of Rapaport; and of claim 26 over Zerhusen, in further view of Matz. *See* 37 C.F.R. § 41.37(c)(1)(iv).

DECISION

We affirm the Examiner’s rejections of claims 1, 2, 5–10, 21, and 23–26 under 35 U.S.C. §§ 101 and 103, but reverse the rejection of these claims under 1, 2, 5–10, 21, and 23–25 under 35 U.S.C. § 112.

Because we have affirmed at least one ground of rejection with respect to each claim on appeal, the Examiner’s decision is affirmed. *See* 37 C.F.R. § 41.50(a)(1).

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. § 41.50(f).

AFFIRMED