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UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

Ex parte MARY GANNON, AMANDA BUCKLEY, HANNAH FIECHTNER, and STEPHANIE L. ROGERS[1]

Appeal 2016-007522
Application 12/890,326
Technology Center 2100

Before BRADLEY W. BAUMEISTER, JON M. JURGOVAN, and PHILLIP A. BENNETT, *Administrative Patent Judges*.

BAUMEISTER, *Administrative Patent Judge*.

DECISION ON APPEAL

Appellants appeal under 35 U.S.C. § 134(a) from the Examiner's Final Rejection of claims 1, 4–12, 14–18, and 20. Br. 1.[2] We have jurisdiction under 35 U.S.C. § 6(b).

We Affirm-In-Part.

Pursuant to our discretionary authority under 37 C.F.R. § 41.50(b), we newly reject claims 1, 10, and 18 under 35 U.S.C. § 101.

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[1] Cerner Innovation, Inc. is listed as the real party in interest. Br. 3.

[2] Rather than repeat the Examiner's positions and Appellants' arguments in their entirety, we refer to the following documents for their respective details: the Final Action mailed June 30, 2015 ("Final Act."); the Appeal Brief filed December 21, 2015 ("Br."); and the Examiner's Answer mailed May 11, 2016 ("Ans.").

STATEMENT OF THE CASE

Appellants describe the present invention as follows:

> Methods, computer systems and computer readable media for receiving data from infusion pumps in a healthcare setting and displaying the data on a user device are provided. Centralized clinician views are provided to enable clinician to provide additional information for infusion data within selected time ranges. Embodiments provide near real-time graphical displays of infusion data to clinicians on separate user devices. In addition, near real-time graphical displays of patient physiologic data is displayed simultaneously to a clinician along with the infusion data.

Abstract.

Independent claims 1, 10, and 18, reproduced below, are illustrative of the claimed subject matter on appeal:

> 1. One or more non-transitory computer storage media having computer-executable instructions embodied thereon, that when executed, perform a method for indicating an action is required for an item associated with infusion documentation, the method comprising:
>
> receiving a continuous data feed from at least one device operable to assist in treating a patient;
>
> receiving a selection of a time range having multiple items from a user interface containing data from the continuous data feed;
>
> displaying more than one item within the selected time range that requires additional information from a clinician;
>
> identifying the additional information required; and
>
> displaying an action box for entering the additional information, the action box listing each item that requires additional information and indicating what additional information is required, wherein the action box is configured to receive input associated with the additional information for each item.

10. Non-transitory computer storage media having computer-executable instructions embodied thereon that, when executed by a computing device, causes the computing device to produce a graphical user interface (GUI), said GUI comprising:

a first display area configured for displaying data from a continuous data feed from at least one additional device;

a second display area configured for receiving a selection of a time range associated with the data;

a third display area configured for displaying items that require additional information from a clinician within the selected time range;

a fourth display area configured for displaying an action box for entering additional information for each item, the action box listing each item that requires additional information and indicating what additional information is required,

wherein the action box is configured to receive the additional information for each item; and

a fifth display area configured for indicating to a clinician if additional information is required for a single cell.

18. A computerized system for entering additional information associated with infusion documentation, the system comprising:

at least one medical device comprising computer readable media transmitting data to a server comprising at least one component;

a device information receiving component for receiving a continuous stream of data from the at least one medical device associated with a patient;

a time range selection component for receiving a selection of a time range associated with the data;

an analyzing component for determining if more than one item of data requires additional information within the selected time range;

> an action component for displaying an action box for entering additional information associated with the more than one item, the action box listing each item that requires additional information and indicating what additional information is required, wherein the action box is configured to receive input associated with the additional information for each item; and
>
> a user device communication component for displaying the items requiring additional information.

Claims 18 and 20 stand rejected under 35 U.S.C. § 101 as being directed to non-statutory subject matter. Final Act. 2.

Claims 1, 18, and 20 stand rejected under 35 U.S.C. § 103(a) as unpatentable over Nessinger et al. (US 2008/0195422 A1; published Aug. 14, 2008) and Ash et al. (US 2008/0004502 A1; published Jan. 3, 2008). Final Act. 3–7.

Claims 4–12, 14–17 stand rejected under 35 U.S.C. § 103(a) as unpatentable over Nessinger, Ash, and various combinations of Henderson et al. (US 2008/0195422), Bello et al. (US 2005/0055242 A1, published Mar. 10, 2005), Fiedler (US 5,592,945, issued Jan. 14, 19967), Suwalski et al. (US 2007/0214014 A1, published Sept. 13, 2007), Radtke et al. (US 2006/0036945 A1, published Feb. 16, 2006), Levy et al. (US 2010/0042437 A1, published Feb. 18, 2010) and Manetta et al. (US 2003/0200117 A1, published Oct. 23, 2003). Final Act. 7–16.

We review the appealed rejections for error based upon the issues identified by Appellants, and in light of the arguments and evidence produced thereon. *Ex parte Frye*, 94 USPQ2d 1072, 1075 (BPAI 2010) (precedential).

THE § 101 REJECTION

Findings and Contentions

The Examiner finds that "[t]he 'medical device comprising computer readable media' recited [in claim 18] is not necessarily a hardware device" and the system, therefore, is claimed broadly enough to read on software per se. Final Act. 2; *see also id.* at 17. The Examiner further explains in the Examiner's Answer that

> both of Appellant's quotes of Segen's Medical Dictionary and the FDA [set forth at pages 7–8 of the Appeal Brief] define the phrase "medical device" as a **contrivance** intended for use in the diagnosis. . . A contrivance may be reasonably interpreted as a "clever plan". Software, per se, may also be reasonably interpreted as a clever plan. Therefore, per Appellant's own explanation of what the claimed "medical device" could be reasonably interpreted as, the broadest reasonable interpretation of the phrase "medical device" includes software, per se.

Ans. 4.

Appellants first argue that "even if claim 18 were directed to software, the Office fails to show that claim 18 is directed to patent-ineligible subject matter." Br. 7. Appellants further argue that the term "medical device" must be interpreted to include hardware. *Id.* at 7–8.

Principles of Law

Patent eligibility is a question of law that is reviewable *de novo*. *Dealertrack, Inc. v. Huber*, 674 F.3d 1315, 1333 (Fed. Cir. 2012).

In determining whether the claims set forth patent eligible subject matter under 35 U.S.C. § 101, we first must determine whether the claims at issue are directed to laws of nature, natural phenomena, or abstract ideas. *Ultramercial, Inc. v. Hulu, LLC*, 772 F.3d 709, 714 (Fed. Cir. 2014). If so, we then must consider whether the claims—both individually and as an

ordered combination—include an element that is sufficient to transform the nature of the claim into a patent-eligible application. *Id.; Alice Corp. Pty. Ltd. v. CLS Bank Intern.*, 134 S.Ct. 2347, 2355 (2014).

> In applying step two of the Alice analysis, we must "determine whether the claims do significantly more than simply describe [the] abstract method" and thus transform the abstract idea into patentable subject matter. . . . We look to see whether there are any "additional features" in the claims that constitute an "inventive concept," thereby rendering the claims eligible for patenting even if they are directed to an abstract idea. . . . Those "additional features" must be more than "well-understood, routine, conventional activity."

Intellectual Ventures I LLC v. Erie Indemnity Company, 850 F.3d 1315, 1328 (Fed. Cir. 2017) (internal citations omitted).

"[C]laims [that] merely require generic computer implementation[] fail to transform [an] abstract idea into a patent-eligible invention." *Id.* (citing *Alice*, 134 S.Ct. at 2357).

Analysis

We need not address the Examiner's interpretation or Appellants' arguments because answering the question, whether the claimed medical device (or any of the other claimed components) is limited to hardware, is not dispositive of whether the rejected claims are directed to non-patentable subject matter. We instead address, then, the patent eligibility of independent claims 1, 10, and 18, as well as dependent claim 20, under a different theory. Because the thrust of our reasoning differs from that of the Examiner's, we designate the rejection under 35 U.S.C. § 101 as constituting a new ground pursuant to 37 C.F.R. § 41.50(b).

We first inquire whether the claims are directed to laws of nature, natural phenomena, or abstract ideas. *Ultramercial*, 772 F.3d at 714. In the

present case, claim 1 sets forth two steps of receiving data ("receiving a continuous data feed" and "receiving a selection of a time range"), a step of displaying and analyzing information ("displaying more than one item. . . that requires additional information"), another step of analyzing data ("identifying the additional information required"), and a step of requesting the input of additional information ("displaying an action box for entering the additional information"). As such, the steps of claim 1, in combination, fundamentally are directed to computer automating the steps of gathering, auditing, and updating medical records. *See, e.g.*, Spec. ¶¶ 19–21.

The concept of gathering, auditing, and updating records constitutes an abstract idea, which is not patent eligible. "[C]ollecting information, analyzing it, and displaying certain results of the collection and analysis" constitute abstract ideas. *Electric Power Group, LLC v. Alstom S.A.*, 830 F.3d 1350 at 1353–54 (Fed. Cir. 2016). A method that "describes a process of organizing information through mathematical correlations and is not tied to a specific structure or machine" constitutes an abstract idea. *Digitech Image Technologies, LLC v. Electronics for Imaging, Inc.*, 758 F.3d 1344 at 1350 (Fed. Cir. 2014).

The fact that claim 1 requires these steps be automated by using a computer does not add significantly more to this abstract idea of gathering, auditing, and updating records. Appellants' Specification does not indicate that the claim 1's steps of gathering data, interpreting the data, or displaying prompts for information in the action box require anything more than conventional computer components be used for their conventional purposes. *See CyberSource Corp. v. Retail Decisions, Inc.*, 654 F.3d 1366, 1371–72 (Fed. Cir. 2011) (noting that method steps that can all be performed in the

human mind, or by a human using a pen and paper, constitute unpatentable mental processes); *see also Intellectual Ventures I*, 850 F.3d at 1328 (repeating the *Alice* Court's holding that claims merely requiring generic or conventional computer implementation, fail to transform an abstract idea into a patent-eligible invention); *see also Preservation Wellness Technologies, LLC. v. Allscripts Healthcare Solutions Inc.*, 2016 WL 2742379 (E.D. Tex. 2016) (finding claims to a system for maintaining patient medical records that uses computer software *and hardware* in their conventional manner to be directed to a patent ineligible abstract idea), *affirmed*, 684 Fed.Appx. 970 (Fed. Cir. 2016) (Rule 36) (non-precedential).

Independent claims 10 and 18 set forth subject matter similar to that of independent claim 1: Independent claim 10 recites a non-transitory computer storage media that causes a computer to produce a graphical user interface having display areas for performing generally the steps of claim 1. Independent claim 18 recites a computer system that comprises at least one medical device and various components that generally perform the method of claim 1.

As such, we reject these independent claims as being directed to patent ineligible subject matter for the same reason set forth above in relation to claim 1.

> The fact that a computer "necessarily exist[s] in the physical, rather than purely conceptual, realm" . . . is beside the point. There is no dispute [] that a computer is a tangible system (in § 101 terms, a "machine"), or that many computer-implemented claims are formally addressed to patent-eligible subject matter. But if that were the end of the § 101 inquiry, an applicant could claim any principle of the physical or social sciences by reciting a computer system configured to implement the relevant concept. Such a result would make the determination of patent eligibility

> "depend simply on the draftsman's art," . . . thereby eviscerating the rule that "'[l]aws of nature, natural phenomena, and abstract ideas are not patentable.'"

Alice, 134 S.Ct. at 2358–59 (internal citations omitted); *see also Preservation Wellness Technologies, LLC.,* (determining claims to a system for maintaining patient medical records that uses computer software *and hardware* in their conventional manner to be directed to a patent ineligible abstract idea).

Dependent claim 20 reads as follows: "The system of claim 18, wherein the user device communication component is operable to distinguish between items that require additional information and items that do not require additional information." Claim 20, then, merely further specifies which particular component performs the abstract step of analyzing the gathered data. We therefore sustain the rejection of claim 20 for the reasons set forth above in relation to the dependent claims.

THE § 103 REJECTIONS

Findings and Contentions

The Examiner finds that Nessinger generally teaches the limitations of independent claim 1, but

> Nessinger fails to specifically show: displaying more than one item that requires additional information from a clinician; identifying the additional information required; and displaying an action box for entering the additional information: the action box listing each item that requires additional information and indicating what additional information is required, wherein the action box is configured to receive input associated with the additional information for each item.

Final Act. 3.

The Examiner finds that Ash teaches these claim limitations absent from Nessinger. *Id.* at 4 (citing Ash ¶¶ 31, 46–48; Figs. 6B, 6C). Specifically, the Examiner clarifies that Ash's inbox 608, depicted in Fig. 6B, is interpreted as corresponding to the claimed "action box." Final Act. 18. The Examiner finds that motivation existed to combine these teachings of Ash with the media as taught by Nessinger. Final Act. 5.

Appellants argue that

> Ash does not teach or suggest ***an*** action box (singular) that *lists* ***each item*** *requiring additional information, indicates what additional information is required,* and *is configured to receive input associated with the additional information for* ***each item***, as is claimed by claims 1 and 18. Specifically, Ash does not teach using a single action box that has all of these features, and Ash[] does not teach using a single box to receive additional information for *each item* that requires additional information, rather than for a single item.

Br. 15.

Analysis

Appellants' arguments are persuasive. As explained by Appellants, "Ash provides an example of a doctor receiving a notification that an item is due for a patient when viewing the patient's electronic medical record." Br. 12 (citing Ash ¶ 46; Fig. 6A). "Upon placing the cursor over the notification, a dialog provides information such as listing each due item. After selecting the notification, the doctor *is navigated to the doctor's inbox,* which provides a list of the due items in a message summary area." *Id.* at 13 (citing Ash ¶¶ 46, 47; Fig. 6B). "The doctor *must then open the message* associated with a single due item." *Id.* at 14 (citing Ash ¶ 48). "[T]he message may indicate that an action may be due and provide various buttons

corresponding to actions that doctor may take." *Id.* (citing Ash ¶ 48; Fig. 6C).

> Accordingly, Ash teaches a notification box indicating that items are due, a message viewing box that lists each message associated with a due item, and individual messages that show the action required for a particular due item. . . . The user must navigate through a series of steps to determine what items are due and require additional information and then to take action associated with a single item.

Br. 15 (citing Ash ¶¶ 46–48).

The Examiner does not explain how Ash teaches a single action box that is configured to receive input associated with the additional information for *plural* information items, as opposed to being configured merely to receive input associated with a *single* information item. *See* Final Act. 17–18; *see also* Ans. 5.

Accordingly, we do not sustain the Examiner's obviousness rejection of independent claim 1, of independent claim 18, which recites similar language, or of claim 18's dependent claim 20. We likewise do not sustain the obviousness rejections of claims 4–9, which depend from claim 1, because the Examiner does not rely on any of the additionally cited references to cure the deficiency of the obviousness rejection explained above. *See* Final Act. 7–11.

Claims 10–12 and 14–17

With respect to remaining independent claim 10, the Examiner relies on Ash for teaching the claimed action box, as explained above. Final Act. 11–12 (finding that Ash teaches the claimed third, fourth, and fifth

display areas). The Examiner further relies on Levy for teaching the claimed fourth and fifth display areas. *Id.* at 12.

It is not completely clear why the Examiner additionally relied on Levy for rejecting claim 10, but not for rejecting claims 1 and 18. But whatever the reasoning may have been, the Examiner does not assert that Levy discloses that a single action box is configured to receive additional information for *plural* items. *See id.* at 12–13. That is, the Examiner does not assert that Levy cures the deficiency noted above in relation to independent claims 1 and 18.

Accordingly, we do not sustain the obviousness rejection of claims 10–12 over the combination of Nessinger, Ash, and Levy. We likewise do not sustain the obviousness rejections of claims 14–17, which depend from claim 10, because the Examiner does not rely on any of the additionally cited references to cure the deficiency of the obviousness rejection of claim 10 explained above. *See* Final Act. 13–16.

DECISION

The Examiner's decision rejecting claims 1, 4–12, 14–18, and 20 is reversed.

Pursuant to our discretionary authority under 37 C.F.R. § 41.50(b), we enter a new ground of rejection under 35 U.S.C. § 101 for independent claims 1, 10, and 18.[3]

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[3] Although we decline to reject the dependent claims under 35 U.S.C. § 101 pursuant to our discretionary authority under 37 C.F.R. § 41.50(b), we emphasize that our decision does not mean that the remaining claims are necessarily patentable. Rather, we merely leave the patentability determination of these claims to the Examiner. *See* MPEP § 1213.02.

Rule 41.50(b) provides that "[a] new ground of rejection pursuant to this paragraph shall not be considered final for judicial review." Rule 41.50(b) also provides the following:

> When the Board enters such a non-final decision, the appellant, within two months from the date of the decision, must exercise one of the following two options with respect to the new ground of rejection to avoid termination of the appeal as to the rejected claims:
>
> > (1) *Reopen prosecution.* Submit an appropriate amendment of the claims so rejected or new Evidence relating to the claims so rejected, or both, and have the matter reconsidered by the examiner, in which event the prosecution will be remanded to the examiner. The new ground of rejection is binding upon the examiner unless an amendment or new Evidence not previously of Record is made which, in the opinion of the examiner, overcomes the new ground of rejection designated in the decision. Should the examiner reject the claims, appellant may again appeal to the Board pursuant to this subpart.
> >
> > (2) *Request rehearing.* Request that the proceeding be reheard under § 41.52 by the Board upon the same Record. The request for rehearing must address any new ground of rejection and state with particularity the points believed to have been misapprehended or overlooked in entering the new ground of rejection and also state all other grounds upon which rehearing is sought.

Further guidance on responding to a new ground of rejection can be found in the Manual of Patent Examining Procedure (MPEP) § 1214.01 (9th Ed., Rev. 9, Nov. 2015).

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-IN-PART
37 C.F.R. § 41.50(b)