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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|---|-------------|----------------------|---------------------|------------------|
| 13/329,872 | 12/19/2011 | Reinhold Schmieding | A8130.0786/P786 | 7254 |
| 24998 | 7590 | 05/02/2018 | EXAMINER | |
| Blank Rome LLP 1825 EYE STREET NW Washington, DC 20006-5403 | | | NGUYEN, TRAN N | |
| | | | ART UNIT | PAPER NUMBER |
| | | | 3686 | |
| | | | NOTIFICATION DATE | DELIVERY MODE |
| | | | 05/02/2018 | ELECTRONIC |

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UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

Ex parte REINHOLD SCHMIEDING, BRYAN T. HANYPSIAK,
ASHLEY WILLOBEE, JAMES H. LUBOWITZ, DANIEL C. BEARD,
UWE KRONEWITER, and AMY S. ROLLER

Appeal 2016-004474¹
Application 13/329,872²
Technology Center 3600

Before HUBERT C. LORIN, MATTHEW S. MEYERS, and
ALYSSA A. FINAMORE, *Administrative Patent Judges*.

FINAMORE, *Administrative Patent Judge*.

DECISION ON APPEAL

¹ Our Decision references Appellants' Specification ("Spec.," filed Dec. 19, 2011), Appeal Brief ("Appeal Br.," filed July 28, 2015), and Reply Brief ("Reply Br.," filed Mar. 22, 2016), as well as the Examiner's Final Office Action ("Final Act.," mailed Feb. 27, 2015), and Answer ("Ans.," mailed Jan. 22, 2016).

² Appellants identify Arthrex, Inc., as the real party in interest.
Appeal Br. 2.

STATEMENT OF THE CASE

Pursuant to 35 U.S.C. § 134(a), Appellants appeal from the Examiner's decision to reject claims 1, 3–5, 7–10, and 13–19. We have jurisdiction under § 6(b). We AFFIRM.

SUBJECT MATTER ON APPEAL

The invention is “directed to a health outcome data collection system and, more particularly, to an internet-based medical procedure outcome system that collects data from patients and doctors to create an interactive health outcome data collection system and allow analysis of the collected data.” Spec. ¶ 1. Claims 1 and 5 are the independent claims on appeal. Independent claim 1, reproduced below, is illustrative of the claimed subject matter:

1. An internet-based patient health outcome data collection system, comprising:
 - one or more computers configured to provide:
 - a web-based patient interface for entering data by a patient into a data collection database, wherein the patient enters the data in response to multiple questionnaires sent to the patient at various predetermined time intervals;
 - a web-based doctor interface for entering data by a doctor into the data collection database and separately from the patient, wherein the data entered via the web-based doctor interface includes information about a surgical procedure performed on the patient, diagnosis and recovery; and
 - an analysis tool for analyzing and processing the data input into the data collection database, wherein the analysis tool allows the doctor to compare data from an individual patient against a group of the doctor's patients, to view data from all patients in the data collection

database that meet a criteria chosen by the doctor, and to view data from all patients in the data collection database.

REFERENCES

The Examiner relies on the following prior art in rejecting the claims on appeal:

| | | |
|----------------------------------|--------------------|--------------|
| Brown (“Brown ’448”) | US 5,832,448 | Nov. 3, 1998 |
| Brown | US 5,933,136 | Aug. 3, 1999 |
| Yang et al. (“Yang”) | US 2004/0107210 A1 | June 3, 2004 |
| Farrington et al. (“Farrington”) | US 2005/0113703 A1 | May 26, 2005 |

David P. Strum et al., *Surgical Suite Utilization and Capacity Planning: A Minimal Cost Analysis Model*, 21 J. of Med. Sys. 309 (1997) (“Strum”).

REJECTIONS

The Examiner rejects the claims on appeal as follows:

claims 1, 3–5, 7–10, and 13–19 under 35 U.S.C. § 101 as non-statutory subject matter;³

claims 1, 3, 4, and 19 under 35 U.S.C. § 103(a) as unpatentable over Brown, Farrington, and Brown ’448;⁴

claims 5, 7, 9, 10, 15, and 18 under 35 U.S.C. § 103(a) as unpatentable over Brown and Farrington;

claims 8 and 13 under 35 U.S.C. § 103(a) as unpatentable over Brown, Farrington, and Applicant Admitted Prior Art (AAPA);

³ The Examiner clarifies that the omission of claim 19 from the statement of rejection in the Final Office Action is a typographical error. Ans. 2.

⁴ The Examiner makes this rejection of claim 19 as a new ground of rejection in the Answer. Ans. 3.

claim 14 under 35 U.S.C. § 103(a) as unpatentable over Brown, Farrington, and Official Notice as supported by Yang; and

claims 16 and 17 under 35 U.S.C. § 103(a) as unpatentable over Brown, Farrington, and Strum.

ANALYSIS

Non-Statutory Subject Matter

Appellants argue claims 1, 3–5, 7–10, and 13–19 as a group. Appeal Br. 6–9; Reply Br. 5–8. We select independent claim 1 as representative. The remaining claims of the group stand or fall with independent claim 1. 37 C.F.R. § 41.37(c)(1)(iv).

An invention is patent-eligible if it claims a “new and useful process, machine, manufacture, or composition of matter.” 35 U.S.C. § 101. The Supreme Court, however, has long interpreted § 101 to include implicit exceptions: “[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) (quoting *Ass’n for Molecular Pathology v. Myriad Genetics, Inc.*, 133 S. Ct. 2107, 2116 (2013)). To “distinguish[] patents that claim laws of nature, natural phenomena, and abstract ideas from those that claim patent-eligible applications of those concepts,” the Supreme Court, in *Alice*, reiterated the two-step framework previously set forth in *Mayo Collaborative Services v. Prometheus Laboratories, Inc.*, 132 S. Ct. 1289 (2012), which, in the first step, considers whether a claim is directed to a patent-ineligible concept, e.g., an abstract idea, and, if so, considers, in the second step, whether the claim recites an inventive concept—an element or combination of elements sufficient to ensure the claim amounts to

significantly more than the abstract idea and transform the nature of the claim into a patent-eligible application. *Alice*, 134 S. Ct. at 2355 (citing *Mayo*, 132 S. Ct. at 1294, 1296–98).

In rejecting independent claim 1 under 35 U.S.C. § 101 as non-statutory subject matter, i.e., subject matter judicially excepted from statutory subject matter, the Examiner analyzes the claim using this two-step framework. Final Act. 2–4; Ans. 5. Pursuant to the first step, the Examiner determines the claim is directed to an abstract idea because it is directed to the concept of “receiving data, processing the received data, and providing data in such way as to allow a doctor to compare data for an individual patient against a group of patients,” which is similar to other concepts the courts have held to be abstract ideas. Ans. 5. Under the second step, the Examiner determines the claim does not recite significantly more than the abstract idea because the elements, considered individually and as an ordered combination, amount to no more than mere instructions to implement the abstract idea on a computer and/or a recitation of generic computer structure that serves to perform generic computer functions that are well-understood, routine, and conventional activities previously known in the industry. Final Act. 3–4.

Pursuant to the first step of the patent-eligibility analysis, Appellants argue that the Examiner has failed to present a prima facie case because the Examiner has provided no evidence to support the determination that the claims are directed to an abstract idea. Appeal Br. 7–9; Reply Br. 6–7. Appellants’ argument does not apprise us of error.

Contrary to Appellants’ argument, the requirement to make a prima facie case is premised on notice, as the Federal Circuit has held that an

examiner establishes a prima facie case by satisfying the notice requirement set forth in 35 U.S.C. § 132. According to the court:

[T]he PTO carries its procedural burden of establishing a prima facie case when its rejection satisfies 35 U.S.C. § 132, in “notify[ing] the applicant ... [by] stating the reasons for [its] rejection, or objection or requirement, together with such information and references as may be useful in judging of the propriety of continuing the prosecution of [the] application.”

In re Jung, 637 F.3d 1356, 1362 (Fed. Cir. 2011) (alterations in original) (quoting § 132). All that is required of the Office is to set forth the statutory basis of the rejection in a sufficiently articulate and informative manner. *Id.* at 1363; *see also Chester v. Miller*, 906 F.2d 1574, 1578 (Fed. Cir. 1990) (“Section 132 is violated when a rejection is so uninformative that it prevents the applicant from recognizing and seeking to counter the grounds for rejection.”).

As set forth above, in determining that independent claim 1 is ineligible, the Examiner evaluates the claim using the two-step analysis for patent eligibility. Final Act. 2–4; Ans. 5. In particular, in determining that the claim is directed to an abstract idea pursuant to the first step, the Examiner explains the claim is directed to the concept of “receiving data, processing the received data, and providing data in such way as to allow a doctor to compare data for an individual patient against a group of patients.” Ans. 5. The Examiner further explains that this concept is similar to other concepts the courts have held to be abstract ideas, such as collecting and comparing known information, obtaining and comparing intangible data, comparing new and stored information using rules to identify options, and data recognition and storage. Ans. 5.

As such, the Examiner sufficiently informs Appellants that independent claim 1 is directed to an abstract idea. Furthermore, there is no indication that Appellants do not recognize or understand the Examiner's determination that the claim is directed to an abstract idea, as Appellants' understanding is manifested in the arguments traversing it. The Examiner's rejection satisfies the notice requirement of 35 U.S.C. § 132 and sets forth a prima facie case of patent-ineligible subject matter. We, therefore, consider Appellants' remaining arguments to determine whether the Examiner erred in rejecting independent claim 1 under 35 U.S.C. § 101. *See Ex Parte Frye*, 94 USPQ2d 1072, 1075 (BPAI 2010) (precedential) (explaining that the Board reviews a rejection for error "based upon the issues identified by appellant, and in light of the arguments and evidence produced thereon").

Appellants argue that just because independent claim 1 is directed to the Internet or software does not mean the claim is an abstract idea. Appeal Br. 6; Reply Br. 7–8. Appellants' argument is not convincing because the Examiner's determination that the claim is directed to abstract idea is not based on the claim reciting the Internet or software. Rather, as set forth above, the Examiner determines that the claims are directed to "receiving data, processing the received data, and providing data in such way as to allow a doctor to compare data for an individual patient against a group of patients," which is similar to other concepts the courts have held to be abstract ideas. Ans. 5.

Appellants also contend that independent claim 1 is not directed to an abstract idea because the claim recites tangible components, such as a "web-based patient interface," a "web-based doctor interface," and an

“analysis tool.” Appeal Br. 6; Reply Br. 8. Appellants’ argument does not apprise us of error.

At the outset, we note that our reviewing court has explained “not every claim that recites concrete, tangible components escapes the reach of the abstract-idea inquiry.” *In re TLI Commc’ns LLC Patent Litig.*, 823 F.3d 607, 611 (Fed. Cir. 2016) (citations omitted). Consequently, the fact that independent claim 1 recites a system comprising various tangible components does not preclude a determination that the claim is directed to an abstract idea.

That said, in determining whether a claim is directed to excluded subject matter, e.g., an abstract idea, pursuant to the first step of the patent-eligibility analysis, the Federal Circuit has explained that “the ‘directed to’ inquiry applies a stage-one filter to claims, considered in light of the specification, based on whether ‘their character as a whole is directed to excluded subject matter.’” *Enfish, LLC v. Microsoft Corp.*, 822 F.3d 1327, 1335 (Fed. Cir. 2016) (quoting *Internet Patents Corp. v. Active Network, Inc.*, 790 F.3d 1343, 1346 (Fed. Cir. 2015)). For computer-implemented inventions in particular, such as the present invention, “the first step in the *Alice* inquiry . . . asks whether the focus of the claims is on the specific asserted improvement in computer capabilities . . . or, instead, on a process that qualifies as an ‘abstract idea’ for which computers are invoked merely as a tool.” *Id.* at 1335–36.

Here, independent claim 1 recites the steps of: entering data by a patient in response to multiple questionnaires sent to the patient at various predetermined time intervals; entering data by a doctor separately from the patient, wherein the data includes information about a surgical procedure

performed on the patient; and analyzing and processing the data to allow a doctor to compare data from an individual patient against a group of the doctor's patients, to view data from all patients that meet a criteria chosen by the doctor, and to view data from all patients. Thus, the claimed invention enables a patient and a doctor to enter data and then processes the data so that the doctor can compare and view the data.

As Appellants point out (Appeal Br. 6; Reply Br. 8), independent claim 1 also recites tangible components. Indeed, the claim recites one or more computers configured to provide a "web-based patient interface," a "web-based doctor interface," and an "analysis tool." The claim and the Specification, however, primarily describe these components in terms of the functions they perform, which, as set forth above, enable a patient and a doctor to enter data so that the doctor can compare and view the data.

Moreover, the Specification does not describe an improvement to the computer capabilities of the claimed invention. Rather, the Specification explains that the claimed invention collects information on large numbers of patients treated by large numbers of providers and the outcomes of the medical treatments to allow for a determination of the comparative effectiveness of different procedures and the best method for treating patients. Spec. ¶¶ 2–4.

In light of the above, the claimed invention uses the recited computing components to perform the functions that enable the collection and processing of data of a specified content. The focus of the claimed invention is not on an improvement in computer capabilities, but rather on a process for collecting and processing data for which computing devices are invoked merely as tools. Appellants, therefore, do not apprise us of error in the

Examiner's determination that the character of independent claim 1, as a whole, is directed to "receiving data, processing the received data, and providing data in such way as to allow a doctor to compare data for an individual patient against a group of patients."

Appellants do not refute that "receiving data, processing the received data, and providing data in such way as to allow a doctor to compare data for an individual patient against a group of patients" is an abstract idea. Indeed, we see no meaningful distinction between the concept of "receiving data, processing the received data, and providing data in such way as to allow a doctor to compare data for an individual patient against a group of patients" and the abstract idea of gathering and analyzing data of a specified content and displaying the results in *Electric Power Group, LLC v. Alstom S.A.*, 830 F.3d 1350, 1353–54 (Fed. Cir. 2016). Accordingly, Appellants do not apprise us of error in the Examiner's determination that the claims are directed to an abstract idea.

Appellants further assert independent claim 1 is restricted by numerous limitations that prevent the claim from foreclosing the abstract idea. Appeal Br. 6–7; Reply Br. 8. Appellants' argument is not convincing.

Even if we were to agree with Appellants that independent claim 1 does not foreclose, i.e., preempt, the abstract idea, preemption is not the test for determining whether a claim is directed to an abstract idea. Although preemption may be the basis for excluding abstract ideas from eligible subject matter, preemption is not the test. *Ariosa Diagnostics, Inc. v. Sequenom, Inc.*, 788 F.3d 1371, 1379 (Fed. Cir. 2015) ("The Supreme Court has made clear that the principle of preemption is the basis for the judicial exceptions to patentability. For this reason, questions on preemption are

inherent in and resolved by the § 101 analysis.”). As set forth above, the limitations of independent claim 1, as well as the Specification, support the Examiner’s determination that the claim is directed to the abstract idea of “receiving data, processing the received data, and providing data in such way as to allow a doctor to compare data for an individual patient against a group of patients.”

Appellants additionally contend that independent claim 1 describes an inventive solution to a long existing problem in the healthcare field. Appeal Br. 6–7; Reply Br. 8. Appellants, however, do not explain what the alleged problem and solution are, and, therefore, do not apprise us of error in the Examiner’s determination that the claim is directed to the abstract idea of “receiving data, processing the received data, and providing data in such way as to allow a doctor to compare data for an individual patient against a group of patients.” Moreover, to the extent Appellants rely on the problem and solution described in the Specification, the problem and solution described in the Specification support the Examiner’s determination that the claim is directed to the abstract idea. As set forth above, the Specification explains that the claimed invention collects information on large numbers of patients treated by large numbers of providers and the outcomes of the medical treatments to allow for a determination of the comparative effectiveness of different procedures and the best method for treating patients. Spec. ¶¶ 2–4. Thus, the Specification explains that the claimed invention determines the best method for treating patients by collecting and analyzing data.

That said, we appreciate that a claim directed to an ineligible concept can effect an improvement to a technical field, which is sufficient to

transform the nature of the claim into a patent-eligible application. *Alice*, 134 S. Ct. 2359–60 (citing *Diamond v. Diehr*, 101 S. Ct. 1048 (1981)). Accordingly, we consider this argument under the second step of the analysis.

Turning to the second step, even if we were to agree with Appellants that the claimed invention describes an inventive solution to a long existing problem in the healthcare field, i.e., an improvement to the healthcare field, we nevertheless fail to see how independent claim 1 recites limitations, alone or in combination, that amount to significantly more than the abstract idea. Independent claim 1 is linked to the healthcare field by only the nature of the data, which is not sufficient to transform the invention into a patent-eligible application. *See Elec. Power*, 830 F.3d at 1355 (“[M]erely selecting information, by content or source, for collection, analysis, and display does nothing significant to differentiate a process from ordinary mental processes, whose implicit exclusion from § 101 undergirds the information-based category of abstract ideas.”).

Appellants further argue that the manner of computer implementation is not the heart of the inventive concept of claimed invention such that a detailed description of that species of computer-implemented concept is not necessary for the patent-eligibility of the pending claims. Appeal Br. 7; Reply Br. 5. Although computer implementation is not the only way to establish an inventive concept, Appellants’ assertion that the computer implementation of the claimed invention is not the inventive concept does not apprise us of error in the Examiner’s determination that independent claim 1 fails to recite an inventive concept amounting to significantly more than the abstract idea.

In view of the foregoing, Appellants do not apprise us of error in the Examiner's determination that independent claim 1 is patent-ineligible, i.e., judicially excepted from statutory subject matter. Accordingly, we sustain the rejection of claims 1, 3–5, 7–10, and 13–19 under 35 U.S.C. § 101.

Obviousness

Appellants argue that the teachings of Brown and Farrington, alone or in combination, would not result in “a web-based doctor interface for entering data by a doctor into the data collection database and separately from the patient, wherein the data entered via the web-based doctor interface includes information about a surgical procedure performed on the patient, diagnosis and recovery,” as recited in independent claim 1. Appeal Br. 9–11. In particular, Appellants contend that Brown does not disclose information about a surgical procedure performed on the patient or about diagnosis and recovery of the patient. *Id.* at 10. Appellants also assert that Farrington does not disclose web-based patient interfaces, web-based doctor interfaces, or entering data about a surgical procedure performed on the patient, diagnosis and recovery. *Id.* at 11. Appellants' arguments are not convincing.

With respect to the disputed limitation, the Examiner relies on Brown for disclosing a web-based doctor interface for entering data by a doctor (Final Act. 6 (citing Brown, Fig. 10)), and on Farrington for teaching data including information about a surgical procedure performed on a patient, diagnosis, and recovery (*id.* at 6–7 (citing Farrington ¶¶ 171, 173)). As such, Appellants' assertion that Brown does not disclose information about a surgical procedure, diagnosis, and recovery does not address the Examiner's

finding regarding Brown and, consequently, does not apprise us of error. Similarly, Appellants' contention that Farringdon does not disclose a web-based doctor interface does not address the Examiner's finding regarding Farringdon and, therefore, is not persuasive of error.

The Examiner does rely on Farringdon for disclosing "information about a surgical procedure performed on the patient, diagnosis and recovery," as recited in the disputed limitation, but Appellants do not explain, and we fail to see, why the cited portions of Farringdon do not teach the claimed information. Farringdon teaches a system for detecting heart related parameters, i.e., data, and analytical tools for analyzing and displaying the data. Farringdon, Abstract. Farringdon further teaches that the data may assist with diagnosis and treatment (Farringdon ¶ 171), and that the system may be used in post-surgical or rehabilitative environments (*id.* ¶ 173). Given that Farringdon teaches the system may be used for diagnosis, as well as in post-surgical or rehabilitative environments, there is sufficient support for the Examiner's finding that Farringdon teaches "information about a surgical procedure performed on the patient, diagnosis and recovery."

Appellants further argue that "[t]here would also be absolutely no motivation for one skilled in the art to combine Farringdon with Brown when the only common element between the two references is the patient." Appeal Br. 11. The Examiner, however, does not rely on both references relating to a patient as the reason for combining the teachings. Rather, the Examiner determines it would have been obvious to include Farringdon's teaching of information relating to a surgical procedure, diagnosis, and recovery with Brown's disclosed system "to monitor patients in real time

after they had surgery.” Ans. 14 (citing Farringdon ¶ 173). Appellants do not address the Examiner’s reason, and, consequently, do not apprise us of error.

In view of the foregoing, Appellants do not apprise us of error in the Examiner’s rejection of independent claim 1. Appellants do not present separate arguments for claims 3–5, 7–10, and 13–18 (Appeal Br. 12), and Appellants’ arguments for claim 19 are the same as the arguments for independent claim 1 (Reply Br. 3–5). Accordingly, we sustain the rejections of claims 1, 3–5, 7–10, and 13–19 under 35 U.S.C. § 103(a).

DECISION

The Examiner’s decision to reject claims 1, 3–5, 7–10, and 13–19 under 35 U.S.C. § 101 is affirmed.

The Examiner’s decision to reject claims 1, 3–5, 7–10, and 13–19 under 35 U.S.C. § 103(a) is affirmed.

No time period for taking any subsequent action in connection with this appeal may be extended under 37 C.F.R. § 1.136(a). 37 C.F.R. § 1.136(a)(1)(iv).

AFFIRMED