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.
12/190,378	08/12/2008	CHARLES SCHNEIDER	CRNI.143167	8696

46169 7590 12/19/2017

SHOOK, HARDY & BACON L.L.P.
(Cerner Corporation)
Intellectual Property Department
2555 GRAND BOULEVARD
KANSAS CITY, MO 64108-2613

EXAMINER
REYES, REGINALD R

ART UNIT	PAPER NUMBER
3686	

NOTIFICATION DATE	DELIVERY MODE
12/19/2017	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):

IPDOCKET@SHB.COM
IPRCDKT@SHB.COM
BPARKERSON@SHB.COM

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

Ex parte CHARLES SCHNEIDER, ELIZABETH BARLOW, and KHALOD KELANTAN PELEGRIN

Appeal 2016-004424[1]
Application 12/190,378[2]
Technology Center 3600

Before HUBERT C. LORIN, NINA L. MEDLOCK, and BRUCE T. WIEDER, *Administrative Patent Judges*.

MEDLOCK, *Administrative Patent Judge*.

DECISION ON APPEAL

STATEMENT OF THE CASE

Appellants appeal under 35 U.S.C. § 134(a) from the Examiner's final rejection of claims 1, 3–7, 9–13, 19, and 21. We have jurisdiction under 35 U.S.C. § 6(b).

We AFFIRM.

---

[1] Our decision references Appellants' Appeal Brief ("Br.," filed September 25, 2015), and the Examiner's Answer ("Ans.," mailed March 11, 2016), and Final Office Action ("Final Act.," mailed May 1, 2015).

[2] Appellants identify Cerner Innovation, Inc., as the real party in interest. Br. 3.

CLAIMED INVENTION

Appellants' claimed invention relates to "a computer-implemented method for associating one or more prior therapies with one or more current therapies." (Spec. ¶ 1).

Claims 1 and 13 are the independent claims on appeal. Claim 1, reproduced below with bracketed numerals added, is illustrative of the claimed subject matter:

> 1. One or more non-transitory computer-readable storage media having, embodied thereon computer-useable instructions that, when executed, implement a method for creating an electronic association between therapies used to treat a patient's clinical problem and utilizing the electronic association when generating discharge instructions for the patient, the method comprising:
>
> [1] receiving a first set of therapies prescribed for the patient prior to the patient being admitted to a current care venue;
>
> [2] accessing the patient's electronic medical record to identify a second set of therapies prescribed for the patient while admitted to the current care venue;
>
> [3] automatically identifying, using a rules engine, at least a first therapy of the first set of therapies and at least a first therapy of the second set of therapies as therapies that are used to treat the same clinical problem;
>
> [4] creating and storing in the patient's electronic medical record an electronic association between the at least the first therapy of the first set of therapies and the at least the first therapy of the second set of therapies identifying them as therapies for treating the same clinical problem in the patient;
>
> [5] receiving an indication that the patient is going to be discharged;

> [6] incident to receiving the indication, communicating for display on a user interface the electronic association of therapies, wherein communicating for display on the user interface comprises visually grouping together in the same viewable area of the user interface the at least the first therapy of the first set of therapies and the at least the first therapy of the second set of therapies;
>
> [7] receiving a discharge input from the user for the electronic association of therapies, the discharge input comprising at least one of an input to resume the at least the first therapy of the first set of therapies or an input to continue the at least the first therapy of the second set of therapies;
>
> [8] generating discharge instructions for the patient based on the discharge input received; and
>
> [9] storing the discharge instructions for the patient in the patient's electronic medical record.

REJECTIONS

Claims 1, 3–7, 9–13, 19, and 21 are rejected under 35 U.S.C. § 101 as directed to non-statutory subject matter.

Claims 1, 3–7, 9–13, 19, and 21 are rejected under 35 U.S.C. § 103(a) as unpatentable over Goodman et al. (US 2008/0052124 A1, pub. Feb. 28, 2008) ("Goodman") and Haitin et al. (US 2007/0088461 A1, pub. Apr. 19, 2007) ("Haitin").

ANALYSIS

Non-Statutory Subject Matter

Appellants argue claims 1, 3–7, 9–13, 19, and 21 as a group (Br. 7–14). We select independent claim 1 as representative. The remaining claims stand or fall with claim 1. *See* 37 C.F.R. § 41.37(c)(1)(iv).

Under 35 U.S.C. § 101, 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 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 (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 Corp.*, 134 S. Ct. at 2355. The first step in that analysis is to "determine whether the claims at issue are directed to one of those patent-ineligible concepts." *Id.* If the claims are not directed to a patent-ineligible concept, e.g., 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." *Id.* (quoting *Mayo*, 566 U.S. at 78).

The Court acknowledged in *Mayo*, that "all inventions at some level embody, use, reflect, rest upon, or apply laws of nature, natural phenomena, or abstract ideas." *Mayo*, 132 S. Ct. at 1293. We, therefore, look to whether the claims focus on a specific means or method that improves the relevant technology or are instead directed to a result or effect that itself is the abstract idea and merely invoke generic processes and machinery. *See Enfish, LLC v. Microsoft Corp.*, 822 F.3d 1327, 1336 (Fed. Cir. 2016).

Here, in rejecting the pending claims under § 101, the Examiner finds that the claims are

> directed to the abstract idea of creating and storing in the patient's electronic medical record an electronic association between the at least the first therapy of the first set of therapies and the at least the first therapy of the second set of therapies identifying them as therapies for treating the same clinical problem in the patient, is a method of organizing human activities.

(Final Act. 5). In other words, the Examiner finds that the claims are directed to creating associations between therapies that treat the same clinical problem, i.e., a method of organizing human activities and, therefore, an abstract idea (Final Act. 5; *see also* Ans. 2–5). The Examiner further finds that this idea is similar to the concept of comparing new and stored information and using rules to identify options (Ans. 2), which the Federal Circuit concluded, in *SmartGene, Inc. v. Advanced Biological Labs., SA*, 555 F. App'x 950, 955 (Fed. Cir. 2014), is an abstract idea. Under the second step of the *Mayo/Alice* framework, the Examiner finds that the additional elements or combination of elements in the claims, other than the abstract idea, amount to no more than "generic computer functions that are well-understood, routine and conventional activities know [sic] to the industry" (Final Act. 2; Ans. 4).

Appellants do not appear to dispute the Examiner's characterization of what the claims are directed to. Rather, Appellants assert that the abstract idea identified by the Examiner is "so narrow that it fails to rise to the level of a basic tool of scientific and technological work" and thus "there is no danger that the claims will preempt any building block of human ingenuity" (Br. 7–8; *see also* Br. 12–14).

There is no dispute that the Supreme Court has described "the concern that drives this exclusionary principle [i.e., the exclusion of abstract ideas from patent eligible subject matter] as one of pre-emption." *Alice Corp.*, 134 S. Ct. at 2354. But, characterizing pre-emption as a driving concern for patent eligibility is not the same as characterizing pre-emption as the sole test for patent eligibility. "The Supreme Court has made clear that the principle of preemption is the basis for the judicial exceptions to patentability" and "[f]or this reason, questions on preemption are inherent in and resolved by the § 101 analysis." *Ariosa Diagnostics, Inc. v. Sequenom, Inc.*, 788 F.3d 1371, 1379 (Fed. Cir. 2015) (citing *Alice Corp.*, 134 S. Ct. at 2354). "[P]reemption may signal patent ineligible subject matter, [but] the absence of complete preemption does not demonstrate patent eligibility." *Id.*

We also cannot agree with Appellants' assertion that "the Office has failed to establish a *prima facie* case of patent ineligibility." (Br. 8). Appellants complain that "the Office has provided no rationale or supporting documentation in support of its conclusion that the elements recited in each of the claims, both independent and dependent, amount to an abstract idea" (*id.* at 9). According to Appellants, "the Office should follow the example set by the Supreme Court in *Alice* and provide evidence supporting its assertion" (*id.*). Appellants also argue that the Examiner has not provided evidence to support the Examiner's analysis under the second step of the *Alice* framework (*id.* at 11).

As an initial matter, we find nothing in *Alice* that requires the Office to identify specific references to support a finding that a claim is directed to an abstract idea. Nor are we aware of other controlling authority that imposes such a requirement. Instead, the Federal Circuit has repeatedly

observed that "the prima facie case is merely a procedural device that enables an appropriate shift of the burden of production." *Hyatt v. Dudas*, 492 F.3d. 1365, 1369 (Fed. Cir. 2007) (citing *In re Oetiker*, 977 F.2d 1443, 1445 (Fed. Cir. 1992)). The court has, thus, held that the USPTO carries its procedural burden of establishing a prima facie case when its rejection satisfies the requirements of 35 U.S.C. § 132 by notifying the applicant of the reasons for rejection, "together with such information and references as may be useful in judging of the propriety of continuing the prosecution of [the] application." *See In re Jung*, 637 F.3d 1356, 1362 (Fed. Cir. 2011). Thus, all that is required of the Office is that it set forth the statutory basis of the rejection in a sufficiently articulate and informative manner as to meet the notice requirement of § 132. *Id.*; *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.").

Appellants do not contend here that the § 101 rejection was not understood or that the Examiner otherwise failed to comply with the notice requirements of § 132. And for all the criticism of a lack of evidentiary support, Appellants put forward no rebuttal evidence to demonstrate that the claimed subject matter is not an abstract idea or involves significantly more than an abstract idea.

Turning to the second step of the *Mayo/Alice* framework, Appellants contend that the claims "recite computer functions [or steps] that are not generic (i.e., not well-understood, routine, and conventional activities previously known in the industry)" (Br. 11) (quoting the language of claim 1, specifically limitations [3], [4], and [8]). Instead, according to

Appellants, the claims "are directed to a new and useful application embodied through the specific combination of novel, non-generic (i.e., not well known, routine, or conventional) computer functions" that when executed by one or more processors, perform "a novel method for accurately reconciling previously- and currently-prescribed therapies that are used to treat the same clinical problem in a patient" (*id.* at 12).

Appellants' argument is not persuasive at least because a finding of novelty or non-obviousness does not automatically lead to the conclusion that the claimed subject matter is patent-eligible. "Groundbreaking, innovative, or even brilliant discovery does not by itself satisfy the § 101 inquiry." *Ass'n. for Molecular Pathology v. Myriad Genetics, Inc.*, 133 S. Ct. 2107, 2117 (2013). Although the second step in the *Mayo/Alice* framework is termed a search for an "inventive concept," the analysis is not an evaluation of novelty or non-obviousness, but rather, a search for "'an element or combination of elements that is sufficient to ensure that the patent in practice amounts to significantly more than a patent upon the [patent-ineligible concept] itself.'" *Alice Corp.*, 134 S. Ct. at 2355. A novel and nonobvious claim directed to a purely abstract idea is, nonetheless, patent-ineligible. *See Mayo*, 566 U.S. at 90. *See also Diamond v. Diehr*, 450 U.S. 175, 188–89 (1981) ("The 'novelty' of any element or steps in a process, or even of the process itself, is of no relevance in determining whether the subject matter of a claim falls within categories of possibly patentable subject matter.").

Appellants further summarily assert that the claims involve functions that go well beyond merely "'using a computer to obtain data, adjust account balances, and issue automated instructions'" and that the "higher level

actions" performed by the claim elements constitute significantly more than the abstract idea itself (Br. 12). Yet, Appellants offer no persuasive argument or technical reasoning to support that position.

We are not persuaded, for the reasons set forth above, that the Examiner erred in rejecting independent claim 1 under 35 U.S.C. § 101. Therefore, we sustain the Examiner's rejection. We also sustain the rejection of claims 3–7, 9–13, 19, and 21, which fall with claim 1.

Obviousness

We are persuaded by Appellants' argument that the Examiner erred in rejecting independent claims 1 and 13 under 35 U.S.C. § 103(a) because Haitin, on which the Examiner relies, does not disclose or suggest "creating and storing in the patient's electronic medical record an electronic association between [two therapies] identifying them as therapies for treating the same clinical problem in the patient" as recited in claim 1, and similarly recited in claim 13 (Br. 17, 19–20).

Haitin is directed to "a system and method for administering medications to a plurality of patients in a medication institution" (Haitin, ¶ 16). Haitin discloses a medicine cabinet that provides instructions to an authorized user for dispensing medication to each patient, as well as patient specific information including a physician order for each patient (*id.*).

In rejecting independent claims 1 and 13 under 35 U.S.C. § 103(a), the Examiner cites paragraphs 100 and 143 and Figures 11 and 12 of Haitin as disclosing the argued limitation (Final Act. 6–9). According to the Examiner, "Fig. 11, shows a list of prescriptions for the patients which includes Azactam and Fortum, which are both antibiotics so they treat the same clinical problem" (Final Act. 3). The Examiner, thus, finds that Haitin

discloses the claimed association between two therapies in its association between Azactam and Fortum.

We have reviewed the cited portions of Haitin, and we find nothing there that discloses or suggests storing an association between two therapies that identifies them as therapies for treating the same clinical problem in the patient, as called for in claims 1 and 13.

Figure 11 of Haitin shows a list of medications for a patient wherein "the physician may then choose to review the patient's current prescriptions and his/her respective details by selecting the RX tab" (Haitin, ¶ 98). The screen of Figure 11 displays the patient's current prescriptions in a list, without regard to the clinical problem treated by the medications. Although the Examiner may be correct that Azactam and Fortum "are both antibiotics so they treat the same clinical problem" (Final Act. 3), there is no indication that any such association is stored in the Haitin system.

Directing our attention to Figure 12 of Haitin, and as an alternative rationale, the Examiner "interprets the brand name as first therapy and the generic medications is interpreted as second therapy, therefore broadly interpreted reads on the identifying step of first and second therapy and also creating and storing in the patient's electronic medical record." (Ans. 6 (citing paragraph 100 and Figure 12 of Haitin; *see also* Final Act. 3)).

Figure 12 of Haitin is used by a physician to select a new medication to prescribe to the patient. Generic medications are displayed in a "Generic Names" tab, while brand name medications are listed in a "Commercial Names" tab. A physician, using the interface of Figure 12, selects a new medication for the patient based on the physician's own knowledge of the patient's needs and medication properties (Haitin ¶ 100). The physician is

free to prescribe either a generic or brand name medication, but the physician must select the appropriate tab to find the desired medication. Although the Examiner may be correct that a brand name and generic equivalent "both can be used to treat the same clinical problem" (Ans. 7), there is no indication that any electronic association between equivalent generic and brand names is stored in the Haitin system. Figure 12 merely discloses displaying generic and brand name medications in different tabs, without regard to the clinical problem treated by the medications. For example, there is no indication that when a physician selects a brand name drug in the "Commercial Names" tab, the system can then suggest a generic equivalent (or vice versa).

In view of the foregoing, we do not sustain the Examiner's rejection of independent claims 1 and 13 under 35 U.S.C. § 103(a). For the same reasons, we also do not sustain the Examiner's rejection of dependent claims 3–7, 9–12, 19, and 21. *Cf. In re Fritch*, 972 F.2d 1260, 1266 (Fed. Cir. 1992) ("dependent claims are nonobvious if the independent claims from which they depend are nonobvious").

DECISION

The Examiner's rejection of claims 1, 3–7, 9–13, 19, and 21 under 35 U.S.C. § 101 is affirmed.

The Examiner's rejection of claims 1, 3–7, 9–13, 19, and 21 under 35 U.S.C. § 103(a) is reversed.

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

AFFIRMED