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UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

Ex parte ROBERT DARIN, RICHARD JOHANNES, and LINDA HYDE

Appeal 2017-007120¹
Application 11/871,615²
Technology Center 3600

Before HUBERT C. LORIN, MICHAEL W. KIM, and
NINA L. MEDLOCK, *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 1–23. We have jurisdiction under 35 U.S.C. § 6(b).

We AFFIRM.

¹ Our decision references Appellants’ Appeal Brief (“App. Br.,” filed December 21, 2016) and Reply Brief (“Reply Br.,” filed April 3, 2017), and the Examiner’s Answer (“Ans.,” mailed February 8, 2017), Advisory Action (“Adv. Act.,” mailed September 14, 2016), and Final Office Action (“Final Act.,” mailed May 31, 2016).

² Appellants identify Carefusion 303, Inc. as the real party in interest. App. Br. 3.

CLAIMED INVENTION

Appellants' claimed invention "generally relate[s] to diagnostic coding and, in particular, relate[s] to the identification of under-coded comorbidities" (Spec. ¶ 3).

Claims 1, 13, and 23 are the independent claims on appeal. Claim 1, reproduced below, is illustrative of the claimed subject matter:

1. A method for identifying under-coded comorbidities, the method comprising the steps of:

receiving a billing entry, the billing entry including a first diagnosis corresponding to a predetermined diagnosis-related group;

determining, with a processor, whether the billing entry includes a second diagnosis corresponding to the predetermined diagnosis-related group;

when the billing entry is determined not to include the second diagnosis, identifying a range of values for test data indicating a second diagnosis according to a reimbursement procedure of a reimbursement agency;

reviewing laboratory information corresponding to the billing entry to determine whether the laboratory information includes test data within the range of values;

and when the laboratory information is determined to include test data indicating the second diagnosis, determining a second billing entry that includes the second diagnosis, wherein when the second billing entry belongs in a diagnosis-related group having a higher reimbursement than the predetermined diagnosis-related group, generating an alert corresponding to the billing entry and the second diagnosis.

REJECTION³

Claims 1–23 are rejected under 35 U.S.C. § 101 as directed to a judicial exception without significantly more.

ANALYSIS

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. *Alice Corp. 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 79, 78).

³ The rejection of claims 1–23 under 35 U.S.C. § 112, second paragraph, has been withdrawn. Adv. Act. 2.

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*, 566 U.S. at 71. Therefore, the Federal Circuit has instructed that claims are to be considered in their entirety to determine “whether their character as a whole is directed to excluded subject matter.” *McRO, Inc. v. Bandai Namco Games Am., Inc.*, 837 F.3d 1299, 1312 (Fed. Cir. 2016) (quoting *Internet Patents Corp. v. Active Network, Inc.*, 790 F.3d 1343, 1346 (Fed. Cir. 2015)).

Here, in rejecting the pending claims under § 101, the Examiner determined that the claims are directed to “identifying under-coded billing entries by reviewing laboratory test data to determine if it indicates a second diagnosis when a second diagnosis is not included in the billing entry,” i.e., to a fundamental economic practice and/or a method of organizing human activity and, therefore, to an abstract idea (Final Act. 5–6 (emphasis omitted)). The Examiner also determined that the claims do not include additional elements that are sufficient to amount to significantly more than the judicial exception because the additional elements or combination of elements in the claims, other than the abstract idea per se, amounts to no more than generic computer structure that serves to perform generic computer functions, e.g., receiving and transmitting data, comparing data, and outputting results (*id.* at 6).

Claim 1, reproduced above, is directed to a method for identifying under-coded comorbidities, and recites that the method comprises (1) receiving a billing entry; (2) determining whether the billing entry includes a second diagnosis; (3) when the billing entry does not include a second diagnosis, comparing laboratory information corresponding to the

billing entry with test data indicating a second diagnosis; and (4) when the laboratory information includes test data indicating the second diagnosis, generating an alert corresponding to the billing entry and the second diagnosis. Claim 1, thus, involves nothing more than collecting data (i.e., a billing entry); analyzing the data (i.e., comparing laboratory information corresponding to the billing entry with test data indicating a second diagnosis); and presenting the results of the collection and analysis (i.e., generating an alert when laboratory information includes test data indicating the second diagnosis) — without any asserted inventive technology for performing these functions.

Addressing step one of the *Mayo/Alice* framework, Appellants maintain that Examiner erred in characterizing the claims as directed to an abstract idea (App. Br. 14). Appellants note that the claim language includes “reviewing laboratory information,” and argue that the claimed invention is “focused to specific ‘laboratory information’ within the realm of healthcare providers in the context of a treatment that has been provided to a patient, rather than ‘abstract data manipulation’” (*id.*).

Appellants’ argument is not persuasive at least because the Federal Circuit has repeatedly held that information collection and analysis, without more, including when limited to particular content, is within the realm of abstract ideas, and that merely presenting the results of the abstract process of collecting and analyzing information is abstract as an ancillary part of the collection and analysis. *See, e.g., Elec. Power Grp. v. Alstom, S.A.*, 830 F.3d 1350, 1353 (Fed. Cir. 2016) (“[W]e have treated collecting information, including when limited to particular content (which does not change its character as information), as within the realm of abstract ideas.”); *SAP Am.*,

Inc. v. Investpic, LLC, 898 F.3d 1161, 1168 (Fed. Cir. 2018) (“As many cases make clear, even if a process of collecting and analyzing information is ‘limited to particular content’ or a particular ‘source,’ that limitation does not make the collection and analysis other than abstract.” (quoting *Elec. Power Grp.*, 830 F.3d at 1355 (citing cases))). Thus, in *Electric Power*, where the method claims at issue were directed to performing real-time performance monitoring of an electric power grid by collecting data from multiple data sources, analyzing the data, and displaying the results, *Elec. Power Grp.*, 830 F.3d at 1351–52, the court held that the claims were directed to an abstract idea because “[t]he advance they purport to make is a process of gathering and analyzing information of a specified content, then displaying the results, and not any particular assertedly inventive technology for performing those functions.” *Id.* at 1354.

Similarly here, as described above, we find that claim 1 involves nothing more than collecting billing data; analyzing the data; and presenting the results — activities squarely within the realm of abstract ideas. *See id.* at 1353–54 (characterizing collecting information, analyzing information by steps people go through in their minds, or by mathematical algorithms, and presenting the results of collecting and analyzing information, without more, as matters within the realm of abstract ideas).

Appellants do not assert that claim 1 (or any other claim, for that matter) involves a new technique for analyzing information. Nor is there any indication in the Specification that the operations recited in claim 1 require any specialized computer hardware or other inventive computer components, invoke any assertedly inventive programming, or that the claimed invention is implemented using other than generic computer

components to perform the claimed method steps. In fact, the Specification discloses just the opposite, i.e., that the claimed invention may be implemented using only generic computer components (*see, e.g.*, Spec. ¶¶ 33–36), which is not enough for patent-eligibility. *DDR Holdings, LLC v. Hotels.com, L.P.*, 773 F.3d 1245, 1256 (Fed. Cir. 2014) (“[A]fter *Alice*, there can remain no doubt: recitation of generic computer limitations does not make an otherwise ineligible claim patent-eligible.”).

Appellants further argue that the claims are not directed to an abstract idea because the claims “include meaningful limitations that significantly improve the technical field of *preparing billing entries for re-imbusement of healthcare costs* to a healthcare provider” (App. Br. 13–14). Yet, it is clear from the Specification that the focus of the claimed invention is on addressing a business objective (i.e., ensuring that all appropriate diagnoses are included on a billing entry so that the treatment facility can recoup the maximum reimbursement to which it is entitled (*see, e.g.*, Spec. ¶¶ 5, 6)), and not only any claimed means for accomplishing that goal that improves technology. The relevant inquiry here is not whether there is a business challenge resolved by the claimed invention but whether the challenge is one rooted in technology, or one where the proposed solution is merely using computers as a tool. *See Enfish, LLC v. Microsoft Corp.*, 822 F.3d 1327, 1335–36 (Fed. Cir. 2016). The alleged improvement that Appellants tout is not an improvement to computer capabilities but instead an alleged improvement to a business practice, i.e., preparing billing entries — a process in which a computer is used as a tool in its ordinary capacity.

It also is significant here, as the Examiner observes (Ans. 3), that although claim 1, for example, recites the use of a processor, the underlying

processes are all acts that could be performed by a human, e.g., mentally or manually, using pen and paper. For example, a person could prepare a billing entry using pen and paper, and could likewise review laboratory information corresponding to the billing entry to determine whether the laboratory information includes test data within the range of values indicating a second diagnosis, either mentally or with the use of pen and paper.

The Federal Circuit has held that if a method can be performed by human thought alone, or by a human using pen and paper, it is merely an abstract idea and is not patent-eligible under § 101. *See CyberSource Corp. v. Retail Decisions, Inc.*, 654 F.3d 1366, 1373 (Fed. Cir. 2011) (“[A] method that can be performed by human thought alone is merely an abstract idea and is not patent-eligible under § 101.”); *Gottschalk v. Benson*, 409 U.S. 63, 67 (1972) (“Phenomena of nature . . . , mental processes, and abstract intellectual concepts are not patentable, as they are the basic tools of scientific and technological work.”). Additionally, mental processes remain unpatentable even when automated to reduce the burden on the user of what once could have been done with pen and paper. *CyberSource*, 654 F.3d at 1375 (“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*.”).

Turning to step two of the of the *Mayo/Alice* framework, Appellants argue that even if the claims are directed to an abstract idea, the claims are nonetheless patent-eligible because the claims include limitations that “add *significantly more* to the field of preparing billing entries for reimbursement of healthcare costs” (App. Br. 14). Appellants, thus, argue that similar to the

situation in *McRO*, the present application includes features that limit the claims to a specific process of preparing billing entries for healthcare costs, and does not preempt other approaches for achieving the same results. That argument is not persuasive of Examiner error at least because preemption is not the sole test for patent-eligibility.

There is no dispute that the Supreme Court has described “the concern that drives [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 are not persuaded of Examiner error to the extent Appellants maintain that the claimed invention is patent-eligible, i.e., that the claims amount to “significantly more” than an abstract idea, because the claims are allegedly novel and/or non-obvious in view of the prior art (App. Br. 16).

A finding of novelty or non-obviousness does not automatically lead to the conclusion that the claimed subject matter is patent-eligible. 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 [ineligible concept] itself.’” *Alice Corp.*, 134 S. Ct. at 2355 (citation omitted). “Groundbreaking, innovative, or even brilliant discovery does not by itself satisfy the § 101 inquiry.” *Ass’n for Molecular Pathology v. Myriad Genetics, Inc.*, 569 U.S. 576, 591 (2013). A novel and non-obvious 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 the § 101 categories of possibly patentable subject matter.”).

We are not persuaded, on the present record, that the Examiner erred in rejecting claims 1–23 under 35 U.S.C. § 101. Therefore, we sustain the Examiner’s rejection.

DECISION

The Examiner’s rejection of claims 1–23 under 35 U.S.C. § 101 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)(1)(iv).

AFFIRMED