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UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

Ex parte CHAD BARRETT RUOFF, MICHAEL DEAN SCHMITT, and
SUSAN TARKKA

Appeal 2016-000512
Application 12/347,575
Technology Center 3600

Before MURRIEL E. CRAWFORD, NINA L. MEDLOCK, and
ROBERT J. SILVERMAN, *Administrative Patent Judges*.

CRAWFORD, *Administrative Patent Judge*.

DECISION ON APPEAL

STATEMENT OF THE CASE

Appellants seek our review under 35 U.S.C. § 134 of the Examiner's final decision rejecting claims 1–20. We have jurisdiction over the appeal under 35 U.S.C. § 6(b).

We AFFIRM.

BACKGROUND

Appellants' invention is directed to a method of determining and displaying whether patients have health care associated infections ("HAI").
Spec. ¶ 3.

Claim 1 is illustrative:

1. One or more computer-storage media having computer-executable instructions embedded thereon for performing steps to determine and store notification of health care associated infections (HAIs) associated with a patient, comprising:

applying one or more rules to patient data to determine whether the patient has an HAI or an infection contracted outside of a health care facility, wherein the one or more rules are configured to analyze criteria associated with the patient, the criteria including (1) patient-specific data including an amount of time elapsed since a surgical procedure was performed on the patient, (2) patient-location data including a location within the health care facility where a recent outbreak has occurred, and (3) treating-clinician data including infections associated with other patients that the treating clinician has treated;

based on applying the one or more rules to the patient data, determining a likelihood that the patient has acquired an infection as a result of being at the health care facility;

determining the infection is an HAI that the patient has acquired as a result of being at the health care facility;

presenting the criteria that were analyzed, and for each of the criteria, presenting an indication of whether each criteria supports the determination that the infection is the HAI that the patient has acquired as a result of being at the health care facility;

receiving an indication from a clinician that the patient has the HAI;

based on the association of the HAI and the patient, identifying one or more suggested tasks to perform to confirm the patient has acquired the HAI as a result of being at the health care facility; and

storing the indication that the patient has the HAI.

Appellants appeal the following rejections:

Claims 1–20 under 35 U.S.C. § 101 as directed to non-statutory subject matter.

Claims 1–20 under 35 U.S.C. § 112, first paragraph, as failing to comply with the written description requirement.

ISSUES

Did the Examiner err in rejecting the claims under 35 U.S.C. § 101 because the claims are not directed to an abstract idea and because even if the claims are directed to an abstract idea, the claims recite significantly more than an abstract idea?

Did the Examiner err in rejecting the claims under 35 U.S.C. § 112, first paragraph because the Specification discloses the step of determining the likelihood that the patient has acquired an infection as a result of being at the health care facility?

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ANALYSIS

Rejection under 35 U.S.C. § 101

We note initially that 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. *E.g.*, *Alice Corp. Pty. Ltd. v. CLS Bank Int’l*, 134 S. Ct. 2347, 2354 (2014).

In determining whether a claim falls within the excluded category of abstract ideas, we are guided in our analysis by the Supreme Court’s two-step framework, described in *Mayo* and *Alice*. *Id.* at 2355 (citing *Mayo Collaborative Servs. v. Prometheus Labs., Inc.*, 132 S. Ct. 1289, 1296–97 (2012)). In accordance with that framework, we first determine whether the claim is “directed to” a patent-ineligible abstract idea. *See Alice*, 134 S. Ct. at 2356 (“On their face, the claims before us are drawn to the concept of intermediated settlement, *i.e.*, the use of a third party to mitigate settlement risk.”); *Bilski v. Kappos*, 561 U.S. 593, 611 (2010) (“Claims 1 and 4 in petitioners’ application explain the basic concept of hedging, or protecting against risk.”); *Diamond v. Diehr*, 450 U.S. 175, 184 (1981) (“Analyzing respondents’ claims according to the above statements from our cases, we think that a physical and chemical process for molding precision synthetic rubber products falls within the § 101 categories of possibly patentable subject matter.”); *Parker v. Flook*, 437 U.S. 584, 594–95 (1978) (“Respondent’s application simply provides a new and presumably better method for calculating alarm limit values.”); *Gottschalk v. Benson*, 409 U.S. 63, 64 (1972) (“They claimed a method for converting binary-coded decimal (BCD) numerals into pure binary numerals.”).

The patent-ineligible end of the spectrum includes fundamental economic practices, *Alice*, 134 S. Ct. at 2357; *Bilski*, 561 U.S. at 611; mathematical formulas, *Parker*, 437 U.S. at 594–95; and basic tools of scientific and technological work, *Gottschalk*, 409 U.S. at 69. On the patent-eligible side of the spectrum are physical and chemical processes, such as

curing rubber, *Diamond*, 450 U.S. at 184 n. 8. “tanning, dyeing, making waterproof cloth, vulcanizing India rubber, smelting ores,” and a process for manufacturing flour, *Gottschalk*, 409 U.S. at 69.

If the claim is “directed to” a patent-ineligible abstract idea, we then consider the elements of the claim—both individually and as an ordered combination—to assess whether the additional elements transform the nature of the claim into a patent-eligible application of the abstract idea. *Alice*, 134 S. Ct. at 2355. This is a search for an “inventive concept”—an element or combination of elements sufficient to ensure that the claim amounts to “significantly more” than the abstract idea itself. *Id.*

The Examiner determined that the claims are directed to the basic concept of providing healthcare by applying one or more rules to patient data, determining the likelihood that the patient has acquired an infection and that the infection is a healthcare facility associated infection (“HAI”) and identifying more suggested tasks. Final Act. 2. The Examiner further found that the one or more rules constitute logic being applied, the determination of a likelihood is a mathematical operation, and the identifying of new tasks is organizing human activities. Final Act. 2. The Examiner still further determined that the claims do not amount to significantly more than the abstract idea and are not an improvement to the functioning of the computer itself and that the computer related claims require no more than a generic computer performing generic computer functions that are well understood, routine and conventional activities previously known to the industry. Final Act. 2–3. We agree.

Appellants argue that even if some of the elements of the claims are directed to a method of organizing human activity, this is insufficient basis

for concluding the claims are directed to an abstract idea. App. Br. 10. This argument is not persuasive because the Examiner determined that the identifying step recites the abstract idea of organizing human activity and also determined that the remainder of the recitations are directed to a mathematical operation. As such, the Examiner found that the claims are directed to two abstract ideas, organizing human activities and a mathematical operation. As such, the Examiner did not rely on only the determination that the identifying step is directed to a method of organizing human activities in making a determination that the claims are directed to an abstract idea. We note that merely combining abstract ideas does not render the combination any less abstract. *Cf. Shortridge v. Found. Constr. Payroll Serv., LLC*, No. 14-CV-04850-JCS, 2015 WL 1739256 (N.D. Cal. Apr. 14, 2015), *aff'd*, 655 F. App'x 848 (Fed. Cir. 2016).

We are not persuaded of error on the part of the Examiner by Appellants' argument that the Examiner has not established that the steps of organizing human activities recited in the claims are directed to the methods or organizing human activities identified by courts as constituting abstract ideas and thus there is insufficient basis for the conclusion that the claims are directed to an abstract idea. Although it is true that only certain methods or organizing human activities have been identified by the courts as constituting abstract ideas, it follows from prior Supreme Court cases, and *Bilski* in particular, that the identifying step at issue here is directed to an abstract idea. Like the risk hedging in *Bilski*, the concept of delivering care is a fundamental health and social assistance practice long prevalent in our system of caregiving. The use of delivering care is also a building block of

both ancient and modern medicine. Thus, delivering care, like hedging, is an abstract idea beyond the scope of § 101. *See Alice*, 134 S. Ct. at 2356.

As in *Alice*, we need not labor to delimit the precise contours of the “abstract ideas” category in this case. It is enough to recognize that there is no meaningful distinction in the level of abstraction between the concept of risk hedging in *Bilski* and the concept of delivering care at issue here. Both are squarely within the realm of “abstract ideas” as the Court has used that term. *See Alice*, 134 S. Ct. at 2357.

We are not persuaded of error on the part of the Examiner by Appellants’ argument that the absence of prior art based rejections of the pending claims necessarily demonstrates that the claims include elements that are not well understood, routine and conventional. App. Br. 10. To the extent that this argument of the Appellants is that the pending claims recite “significantly more” because the claimed invention is “novel” and “non-obvious,” Appellants misapprehend the controlling precedent. Although the second step in the *Alice/Mayo* 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*, 134 S. Ct. at 2355 (alteration in original) (quoting *Mayo*, 132 S. Ct. at 1294). A novel and nonobvious claim directed to a purely abstract idea is, nonetheless, patent-ineligible. *See Mayo*, 132 S. Ct. at 1304.

In addition, we agree with the Examiner’s determination made in the Final Action and the Answer that the elements of claim 1 in addition to the abstract ideas on which the claim is based relate to presenting or displaying

information, receiving input from a user and storing the input, all of which functions are routine and well understood computer technologies and require no more than a generic computer. Final Act. 4; Ans. 5. We note that this finding is supported by Appellants' Specification which discloses that a general purpose computer is all that is needed to perform the steps of the invention. Spec. 22, 24–25.

We are not persuaded of error on the part of the Examiner by Appellants' argument that the claims pose no risk of preempting an abstract idea itself. App. Br. 16–17. “While preemption may signal patent ineligible subject matter, the absence of complete preemption does not demonstrate patent eligibility.” *Ariosa Diagnostics, Inc. v. Sequenom, Inc.*, 788 F.3d 1371, 1379 (Fed. Cir. 2015); *see also OIP Techs., Inc. v. Amazon.com, Inc.*, 788 F.3d 1359, 1362–63 (Fed. Cir. 2015) (“[T]hat the claims do not preempt all price optimization or may be limited to price optimization in the e-commerce setting do not make them any less abstract.”), *cert. denied*, 136 S. Ct. 701 (2015) (mem.). And, “[w]here a patent’s claims are deemed only to disclose patent ineligible subject matter under the *Mayo* framework, as they are in this case, preemption concerns are fully addressed and made moot.” *Ariosa*, 788 F.3d at 1379.

We have considered the other arguments of the Appellants and have not been persuaded by these arguments of error on the part of the Examiner.

In view of the foregoing, we will sustain the Examiner’s rejection of claim 1. We will also sustain the rejection as it is directed to the remaining claims because the Appellants have not presented arguments directed to the separate eligibility of these claims.

Rejection under 35 U.S.C. § 112, first paragraph

We will not sustain this rejection because we agree with the Appellants that the Specification describes determining the likelihood that a patient has acquired an infection as a result of being at the health care facility in such a way as to convey to the artisan that the Appellants had possession, at the time the present application was filed, of the claimed subject matter. App. Br. 17–18; *see Vas-Cath, Inc. v. Mahurkar*, 935 F.2d 1555, 1563–64 (Fed. Cir. 1991); *In re Kaslow*, 707 F.2d 1366, 1375 (Fed. Cir. 1983). Support for this subject matter can be found in the Specification at paragraph 36 where it is disclosed that the rule applied to patient data may raise the likelihood that the current patient contracted the infectious illness from the x-ray room. Support is also found in original claim 17 which recites that the server is configured to determine whether the patient has likely been affected by at least one HAI. We note that the Examiner’s argument that the Specification does not disclose how such likelihood or probability is determined (Final Act. 3), appears to be directed not to the written description requirement in the first paragraph of 35 U.S.C. § 112 but rather to the enablement requirement in that paragraph.

DECISION

We affirm the Examiner’s § 101 rejection.

We do not affirm the Examiner’s § 112, first paragraph rejection.

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TIME PERIOD

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) (2009).

ORDER

AFFIRMED