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UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

Ex parte JAMES M. GILL

Appeal 2017-009117
Application 14/048,360
Technology Center 3600

Before ELENI MANTIS MERCADER, JASON J. CHUNG, and JOYCE CRAIG, *Administrative Patent Judges*.

CRAIG, *Administrative Patent Judge*.

DECISION ON APPEAL

Appellant[1] appeals under 35 U.S.C. § 134(a) from the Examiner's Non-Final Rejection of claims 1 and 9, which are all of the claims pending in this application.[2] We have jurisdiction under 35 U.S.C. § 6(b).

We affirm.

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[1] According to Appellant, the real party in interest is Delaware Valley Outcomes Research LLC. App. Br. 3.

[2] Claims 2–8 and 10–20 have been canceled. App. Br. 26–27 (Claim App'x).

INVENTION

Appellant's invention relates to a computer method for exploring drugs in disease. Title, Abstract. Claim 1 is illustrative and reads as follows:

> 1. A Clinical Decision Support (CDS) system comprising:
>
> a communication interface configured to receive data from a Clinical Decision Support (CDS) system integrated into a patient's Electronic Health Record (EHR);
>
> a medication database containing information related to associated conditions and medications for the associated conditions; and
>
> a processor that receives the data from the CDS system and matches the data from the CDS system with information related to associated conditions and medications for the associated conditions from the medication database, and identifies a specific medication from a plurality of medications in the medication database based on a patient's specific medical condition as identified in the patient's EHR, the specific medication is a medication requested for marketing by a manufacturer of the specific medication or a medication requested for recommendation to healthcare providers by an insurance company;
>
> the communication interface displays a link to the specific medication, and the link is displayed as a pop-up box integrated within the CDS system; and
>
> user interaction with the link controls the CDS system to generate additional information regarding the specific medication, the additional information includes prescription information for the specific medication and advertising materials associated with the specific medication, and activating the link generates a prescription for the specific medication for the patient.

App. Br. 26–27 (Claims App'x).

REJECTIONS

Claims 1 and 9 stand rejected under 35 U.S.C. § 101 because the claimed invention is directed to a judicial exception, without significantly more. Non-Final Act. 2–6.

Claims 1 and 9 stand rejected under 35 U.S.C. § 103(a) as unpatentable over the combination of Brett et al. (US 2008/0243547 A1; published Oct. 2, 2008) ("Brett") and Fiedotin et al. (US 7,509,263 B1; issued Mar. 24, 2009) ("Fiedotin"). Non-Final Act. 6–12.

ANALYSIS

Rejection of Claims 1 and 9 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. However, the Supreme Court has long interpreted 35 U.S.C. § 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*, 573 U.S. 208, 216 (2014).

In determining whether a claim falls within an excluded category, we are guided by the Supreme Court's two-step framework, described in *Mayo* and *Alice*. *Id.* at 217–18 (citing *Mayo Collaborative Servs. v. Prometheus Labs., Inc.*, 566 U.S. 66, 75–77 (2012)). In accordance with that framework, we first determine what concept the claim is "directed to." *See Alice*, 573 U.S. at 219 ("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."); *see also 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.").

Concepts determined to be abstract ideas, and thus patent ineligible, include certain methods of organizing human activity, such as fundamental economic practices (*Alice*, 573 U.S. at 219–20; *Bilski*, 561 U.S. at 611); mathematical formulas (*Parker v. Flook*, 437 U.S. 584, 594–95 (1978)); and mental processes (*Gottschalk v. Benson*, 409 U.S. 63, 67 (1972)). Concepts determined to be patent eligible include physical and chemical processes, such as "molding . . . rubber products" (*Diamond v. Diehr*, 450 U.S. 175, 193 (1981)); "tanning, dyeing, making water-proof cloth, vulcanizing India rubber, smelting ores" (*id.* at 182 n.7 (quoting *Corning v. Burden*, 56 U.S. 252, 267–68 (1854))); and manufacturing flour (*Benson*, 409 U.S. at 69 (citing *Cochrane v. Deener*, 94 U.S. 780, 785 (1876))).

In *Diehr*, the claim at issue recited a mathematical formula, but the Supreme Court held that "[a] claim drawn to subject matter otherwise statutory does not become nonstatutory simply because it uses a mathematical formula." *Diehr*, 450 U.S. at 176; *see also id.* at 191 ("We view respondents' claims as nothing more than a process for molding rubber products and not as an attempt to patent a mathematical formula."). Having said that, the Supreme Court also indicated that a claim "seeking patent protection for that formula in the abstract . . . is not accorded the protection of our patent laws, . . . and this principle cannot be circumvented by attempting to limit the use of the formula to a particular technological environment." *Id.* (citing *Benson* and *Flook*); *see, e.g.*, *id.* at 187 ("It is now commonplace that an application of a law of nature or mathematical formula to a known structure or process may well be deserving of patent protection." (emphasis omitted)).

If the claim is "directed to" an abstract idea, we turn to the second step of the *Alice* and *Mayo* framework, where "we must examine the elements of the claim to determine whether it contains an 'inventive concept' sufficient to 'transform' the claimed abstract idea into a patent-eligible application." *Alice*, 573 U.S. at 221 (internal quotation marks omitted). "A claim that recites an abstract idea must include 'additional features' to ensure 'that the [claim] is more than a drafting effort designed to monopolize the [abstract idea].'" *Id.* (quoting *Mayo*, 566 U.S. at 77). "[M]erely requir[ing] generic computer implementation[] fail[s] to transform that abstract idea into a patent-eligible invention." *Id.*

The PTO recently published revised guidance on the application of § 101. 2019 Revised Patent Subject Matter Eligibility Guidance, 84 Fed. Reg. 50 (Jan. 7, 2019) (hereinafter "2019 Guidance"). Under that guidance, we first look to whether the claim recites:

> (1) any judicial exceptions, including certain groupings of abstract ideas (i.e., mathematical concepts, certain methods of organizing human interactions such as a fundamental economic practice, or mental processes); and
>
> (2) additional elements that integrate the judicial exception into a practical application (*see* MPEP § 2106.05(a)–(c), (e)–(h)) (9th ed. 2018).

Only if a claim (1) recites a judicial exception and (2) does not integrate that exception into a practical application, do we then look to whether the claim:

> (3) adds a specific limitation beyond the judicial exception that are not "well-understood, routine, conventional" in the field (*see* MPEP § 2106.05(d)); or

> (4) simply appends well-understood, routine, conventional activities previously known to the industry, specified at a high level of generality, to the judicial exception.

See 2019 Guidance. Patent eligibility under 35 U.S.C. § 101 is a question of law that is reviewable de novo. *See Dealertrack, Inc. v. Huber*, 674 F.3d 1315, 1333 (Fed. Cir. 2012).

Here, the Examiner concluded the claims are abstract because the claims are directed to abstract ideas of (1) comparing new and stored information and uses rules to identify options (such as using clinical decision data to match patient's medical condition with specific medication either by marketing or recommendation; and (2) collecting information, analyzing it, and displaying certain results of the collection and analysis. Ans. 11.

Appellant contends "claim 1 is not directed to a judicial exception of an abstract idea because claim 1 does not recite a fundamental economic or longstanding commercial practice, a method of organizing human activity, an idea of itself or a mathematical algorithm." App. Br. 11 (emphasis omitted).

Step 2A, Prong One – Recited Judicial Exception

Step 2A of the 2019 Guidance is a two-prong inquiry. In Prong One we evaluate whether the claim recites a judicial exception. For abstract ideas, Prong One represents a change as compared to prior guidance because we determine whether the claim recites mathematical concepts, certain methods of organizing human activity, or mental processes.

We conclude the following limitation of independent claim 1 recites certain methods of organizing human activity, an abstract idea:

> user interaction with the link controls the CDS system to generate additional information regarding the specific medication, the additional information includes prescription information for the specific medication and advertising materials associated with the specific medication, and activating the link generates a prescription for the specific medication for the patient.

App. Br. 26 (claim App'x).

Independent claim 9 similarly recites certain methods of organizing human activity, an abstract idea:

> controlling the CDS system by user interaction with the link;
>
> generating and displaying additional information on the communication interface about the specific medication when a user activates the link, the additional information including prescription information for the specific medication and advertising materials associated with the specific medication; and
>
> generating a prescription for the specific medication for the patient when the link is activated.

Id. at 26–27. In particular, the claimed concept of allowing users to click on a link to receive additional information about a specific medication and to generate a prescription for a patient is a method of managing relationships or interactions between people, which falls within the "Certain Methods of Organizing Human Activity" grouping in the 2019 Guidance.

Because we conclude the independent claims recite an abstract idea, we proceed to Prong Two to determine whether the claims are "directed to" the judicial exception.

Step 2A, Prong Two – Practical Application

If a claim recites a judicial exception, we determine whether the recited judicial exception is integrated into a practical application of that

exception by: (a) identifying whether there are any additional elements recited in the claim beyond the judicial exception(s); and (b) evaluating those additional elements individually and in combination to determine whether they integrate the exception into a practical application. If the recited judicial exception is integrated into a practical application, the claim is not directed to the judicial exception.

Here, claim 1 recites the additional elements of:

> a communication interface configured to receive data from a Clinical Decision Support (CDS) system integrated into a patient's Electronic Health Record (EHR);
>
> a medication database containing information related to associated conditions and medications for the associated conditions; and
>
> a processor that receives the data from the CDS system and matches the data from the CDS system with information related to associated conditions and medications for the associated conditions from the medication database, and identifies a specific medication from a plurality of medications in the medication database based on a patient's specific medical condition as identified in the patient's EHR, the specific medication is a medication requested for marketing by a manufacturer of the specific medication or a medication requested for recommendation to healthcare providers by an insurance company;
>
> the communication interface displays a link to the specific medication, and the link is displayed as a pop-up box integrated within the CDS system[.]

Claim 9 recites the additional elements of:

> receiving data from a Clinical Decision Support (CDS) system at a communication interface integrated into a patient's Electronic Health Record (EHR);
>
> identifying an associated condition based on the patient's EHR in the CDS system at a processor, the processor receiving

> data from the CDS system and matching the data from the CDS system with information related to the associated condition based on the patient's EHR;
>
> identifying a specific medication at the processor from a medication database including a plurality of medications that is specifically recommended for treating the associated condition, the specific medication is a medication requested for marketing by a manufacturer of the specific medication or a medication requested for recommendation to healthcare providers by an insurance company;
>
> selecting the specific medication at the processor specifically recommended for treating the associated condition;
>
> generating and displaying a link on the communication interface to the specific medication in the CDS system, the link being displayed as a pop-up box integrated within the CDS system[.]

Considering claims 1 and 9 as a whole, the additional elements apply or use the abstract idea in a meaningful way such that the claims as a whole are more than a drafting effort designed to monopolize the exception. For example, the processor identifies the specific medication from a plurality of medications in the medication database based on a patient's specific medical condition.

Because claims 1 and 9 integrate the recited judicial exception into a practical application, they are not "directed to" a judicial exception and, therefore, our inquiry ends. Stated another way, we need not discuss whether the present claims are significantly more than any abstract idea under step 2B.

For these reasons, under the 2019 Guidance, we are persuaded that the Examiner erred in concluding claims 1 and 9 are judicially-excepted from

patentability, and we reverse the Examiner's § 101 rejection of independent claims 1 and 9.

Rejection of Claims 1 and 9 under 35 U.S.C. § 103(a)

We have reviewed the § 103(a) rejection of claims 1 and 9 in light of Appellant's arguments that the Examiner erred. We have considered in this decision only those arguments Appellant actually raised in the Briefs. Any other arguments Appellant could have made, but chose not to make, in the Briefs are waived. *See* 37 C.F.R. § 41.37(c)(1)(iv).

Appellant's § 103(a) arguments are not persuasive of error. We agree with and adopt as our own the Examiner's findings of facts and conclusions as set forth in the Answer (Ans. 14–16) and in the Action from which this appeal was taken (Non-Final Act. 7–12). We provide the following explanation for emphasis.

Appellant first contends the Examiner erred because the cited portions of Fiedotin do not teach or suggest

> a communication interface displays a link to the specific medication, and the link is displayed as a pop-up box integrated within the CDS system, where the specific medication is a medication requested for marketing by a manufacturer of the specific medication or a medication requested for recommendation to healthcare providers by an insurance company,

as claim 1 requires. App. Br. 19. In particular, Appellant argues the relevant portions of Fiedotin cited by the Examiner merely disclose a graphical user interface (GUI) that lists all possible health plans that a patient may belong to (App. Br. 19) and "never discloses identifying a specific medication at all" (*id.* at 22) (emphasis omitted). Appellant argues Fiedotin requires a physician to provide "some type of input, whether

through scrolling, searching a specific name, or a specific class, to identify a specific medication." Reply Br. 11.

We are not persuaded the Examiner erred. The test for obviousness is not whether the claimed invention is expressly suggested in any one or all of the references, but whether the claimed subject matter would have been obvious to those of ordinary skill in the art in light of the combined teachings of those references. *See In re Keller*, 642 F.2d 413, 425 (CCPA 1981).

With regard to identifying a specific medication, the Examiner found Fiedotin's Figures 3C–3G teach or suggest a search for a specific medication based on a patient's medical condition. Ans. 14–15 (citing Fiedotin, 11:63–12:17). The Examiner found Fiedotin teaches or suggests displaying medications in a pop-up box. Non-Final Act. 8 (citing Fiedotin, 11:52–62). Appellant has not persuasively rebutted the Examiner's findings. Moreover, Appellant has not persuaded us that the claim language should be read narrowly[3] to exclude a physician providing input during the identification of a medication. The plain language of the claim is silent as to how the processor identifies a specific medication from a plurality of medications in the medication database. Moreover, Appellant's Specification describes broadly that the processor "identifies a marketed medication." Spec. ¶ 31.

With regard to the limitation "the specific medication is a medication requested for marketing by a manufacturer of the specific medication or a medication requested for recommendation to healthcare providers by an insurance company," we are also not persuaded of Examiner error. The

[3] We give the claim its broadest reasonable interpretation consistent with the Specification. *See In re Morris*, 127 F.3d 1048, 1054 (Fed. Cir. 1997).

Examiner interpreted "a medication requested for recommendation to healthcare providers by an insurance company" as broad enough to encompass Fiedotin's teaching of all medications or drugs under the Cigna plan. Ans. 8. Appellant has not persuasively shown that the Examiner's interpretation is overly broad, unreasonable, or inconsistent with the Specification. The Specification describes only "a medication which the insurance company has requested marketing through the clinical support decision marketing system." Spec. ¶ 23; *see also* Spec. ¶ 38.

Moreover, the Examiner cited several sections of Fiedotin as teaching marketing by pharmaceutical companies. Ans. 15–16 (citing Fiedotin, 17:25–50). In particular, the Examiner found Fiedotin teaches "displaying formularies to physicians at the point of care increases on formulary prescribing and renders the rest of their marketing campaign more effective where the pharmaceutical company has good formulary positioning." *Id.* at 15 (emphasis omitted). The Examiner concluded the limitation "the specific medication is a medication requested for marketing by a manufacturer of the specific medication" is broad enough to encompass Fiedotin's teaching that pharmaceuticals manufacturers market their products. *Id.* at 16. Appellant has not persuaded us that the cited portions of Fiedotin would not have at least suggested "the specific medication is a medication requested for marketing by a manufacturer of the specific medication" to an artisan of ordinary skill in the art.

Appellant next contends "the Examiner completely ignored the claim limitation that interaction with the link results in a prescription for the specific medication being generated." App. Br. 23 (emphasis omitted).

We disagree. The Examiner found Fiedotin teaches that displaying formularies to physicians at the point of care increases formulary prescribing and renders the rest of the marketing campaign more effective. Ans. 15–16 (citing Fiedotin, 17:25–50). The Examiner further found that the application "activates the link from screen to screen that deals with the specific drug," links formulary data with clinical data, and can default to a "Dosing Screen" for the drug. Non-Final Act. 9 (emphasis omitted). The Examiner also found Fiedotin teaches online prescription ordering. *Id.* at 11–12 (citing Fiedotin, 18:6–9). Appellant has not presented persuasive argument or objective evidence to rebut these finding by the Examiner. Nor has Appellant persuaded us that the claimed subject matter would not have been obvious to those of ordinary skill in the art in light of the combined teachings of those references. *See In re Keller*, 642 F.2d at 425.

For these reasons, we are not persuaded the Examiner erred in finding the combination of Brett and Fiedotin teaches or suggests the disputed limitations of claim 1.

Accordingly, we sustain the Examiner's § 103 rejection of independent claim 1, as well as the Examiner's § 103 rejection of independent claim 9, which Appellant argues is patentable for similar reasons. App. Br. 23–24.

DECISION

We reverse the Examiner's decision rejecting claims 1 and 9 under 35 U.S.C. § 101.

We affirm the Examiner's decision rejecting claims 1 and 9 under 35 U.S.C. § 103(a).

Because we affirm at least one ground of rejection with respect to each claim on appeal, the Examiner's decision rejecting claims 1 and 9 is affirmed. *See* 37 C.F.R. § 41.50(a)(1).

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). *See* 37 C.F.R. § 41.50(f).

AFFIRMED