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UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

Ex parte STEVEN A. BOUSAMRA¹

Appeal 2017-011215
Application 13/107,301
Technology Center 1600

Before JOHN G. NEW, TAWEN CHANG, and RACHEL H. TOWNSEND,
Administrative Patent Judges.

NEW, *Administrative Patent Judge.*

DECISION ON APPEAL

¹ Appellant identifies the real party-in-interest as Roche Diabetes Care, Inc.
App. Br. 3.

SUMMARY

Appellant files this appeal under 35 U.S.C. § 134(a) from the Examiner's Final Rejection of claims 1–9 and 20–26 as unpatentable under 35 U.S.C. § 101 as being directed to nonstatutory subject matter.

We have jurisdiction under 35 U.S.C. § 6(b).

We AFFIRM.

NATURE OF THE CLAIMED INVENTION

Appellant's invention is directed to a method for constructing a structured test having user-defined adherence criteria. Abstr.

REPRESENTATIVE CLAIM

Claim 1 is representative of the claims on appeal and recites:

1. A method for measuring glucose levels of a patient, comprising:

receiving, by a diabetes management device, from the patient an objective for a structured test;

identifying, by the diabetes management device, a test template that corresponds to the objective from a plurality of predefined test templates, where the identification of a test template is in response to receiving an objective for the structured test from the patient and the identified test template specifies one or more collection events for obtaining blood glucose measurements;

presenting, by the diabetes management device, the patient with a plurality of contextual criterion for the identified test template, where the presenting the patient with the plurality of contextual criterion is in response to receiving an objective for the structured test from the patient and the plurality of contextual

criterion are associated with the identified test template and the plurality of contextual criterion differ amongst the test templates in the plurality of predefined test templates;

receiving, by the diabetes management device, one or more contextual criterion selected by the patient from the plurality of contextual criterion;

constructing, by the diabetes management device, a structured test in accordance with the selected contextual criterion and the identified test template, where the construction of the structured test is in response to receiving one or more contextual criterion and the structured test includes one or more collection events and a prompt of the patient to input information pertaining to the selected contextual criterion; and

administering, by the diabetes management device, the structured test to the patient, including prompting the patient to provide a sample of blood to a glucose meter, such that the steps of the method are implemented by a computer processor of the diabetes management device.

App. Br. 16–17.

ISSUES AND ANALYSES

We are persuaded by, and expressly adopt, the Examiner’s findings, reasoning, and conclusion that Appellant’s claims are directed to nonstatutory subject matter. We address the arguments raised by Appellant below.

Issue

Appellant argues the Examiner erred because the claims are directed to a process and do not recite a basic concept that is similar to any abstract idea previously identified by the courts. App. Br. 10, 13.

Analysis

The Examiner finds Appellant's claims are drawn to an abstract process of information management. Final Act. 4. The Examiner finds that the claims recite a method of receiving a patient objective, identifying a test template corresponding to the input objective, presenting the patient with a plurality of criteria, receiving a selection of criteria, constructing a test based on the selected criteria and the identified test template, and administering the structured test. *Id.* The Examiner finds that identifying a test template based on an inputted objective, and constructing a test based on the template and criterion presented to and selected by the user, amount to information management, and the claims are therefore directed to an abstract idea. *Id.*

The Examiner notes that although the claimed method may be implemented on a computer system or embedded in a computer-readable medium comprising instructions for carrying out the method, it is the underlying invention that is analyzed to determine subject matter eligibility, and not just the use of a computer system or computer program product. Final Act. 4–5. The Examiner finds that the method steps themselves are therefore directed to an abstract idea, because they do not purport to improve the functioning of the computer itself, nor is there any recitation of improved computer technology or an improvement in any other technology or technical field. *Id.* at 5.

The Examiner next finds that the receiving of an objective, and the administration of a structured test, are merely input and output of data, which the Examiner finds are insignificant extra-solution activities. Final Act. 5. The Examiner notes that no additional steps are recited in the claims invention that would amount to significantly more than the judicial

exception and that, without additional limitations, a process that employs mathematical algorithms to manipulate existing information to generate additional information is not patent eligible. *Id.* The Examiner further finds that, “if a claim is directed essentially to a method of calculat[ion] using a mathematical formula, even if the solution is for a specific purpose, the claimed method is non-statutory.” *Id.*

Appellant contends that the Examiner’s characterization of the claims as being directed to “information management” is overly broad, and that the claims are not directed to an abstract concept. App. Br. 10 (quoting Final Act. 3). Similarly, Appellant argues, the Examiner’s finding that the claims do not improve computer or glucose meter device technology and instead merely “receive, identify, request[], construct[] and administer[] information,” is “at a high level of abstraction that is untethered to the claim language.” *Id.* at 10–11 (citing Office Act, of August 5, 2016 (the “August 5th Office Act.”) 7).

According to Appellant, the claims on appeal address the problem of helping a patient to better understand which factors may impact glucose measurements. App. Br. 11. Appellant asserts that, by “selecting from the presented contextual criteria, the patient better understands which factors may impact their glucose measurements.” *Id.* Furthermore, contends Appellant, the selected contextual criterion is incorporated into the structured test administered to the patient and thereby achieves better results. *Id.* In other words, Appellant argues, the constructed structured test gathers data that is more pertinent to the patient’s condition and helps to improve diagnosis by the healthcare provider as explained in the present application. *Id.*

Appellant next points to our reviewing court's holding in *Trading Techs. Int'l, Inc. v. CQG, Inc.*, 675 F. App'x 1001 (Fed. Cir. 2017). App. Br. 11. In *CQG*, the claims were directed to: "A method for displaying market information relating to and facilitating trading of a commodity being traded in an electronic exchange having an inside market with a highest bid price and a lowest ask price on a graphical user interface." App. Br. 11 (quoting *Trading Techs.*, 675 F. App'x at 1003). Appellant contends that, in finding the claims to be patent eligible, the court reasoned that: "the claims require a specific, structured graphical user interface paired with a prescribed functionality directly related to the graphical user interface's structure that is addressed to and resolves a specifically identified problem in the prior state of the art." *Id.* at 12 (quoting *Trading Techs.*, 675 F. App'x at 1004). Appellant notes that the court also stated that: "ineligible claims generally lack steps or limitations specific to solution of a problem, or improvements in the functioning of technology." *Id.* (quoting *Trading Techs.*, 675 F. App'x at 1005).

Appellant argues that the claims on appeal are more analogous to the claims in *Trading Techs.*, and to those in *McRO, Inc., v. Bandai Namco Games Am. Inc.*, 837 F.3d 1299 (Fed. Cir. 2016), than to any court decision identified by the Examiner. App. Br. 13. Appellant asserts that the claims improve the technical field of measuring glucose levels by enabling patients to better understand contextual and other factors that impact glucose measurements. *Id.* Additionally, argues Appellant, the structured test administered to the patient gathers data that is more pertinent to the patient's condition and thereby helps to improve diagnosis of the patient. *Id.* Therefore, Appellant argues, by reciting limitations that are specifically

designed to achieve an improvement, the pending claims are patent eligible.
Id.

We are not persuaded by Appellant’s arguments. We agree with Appellant that the claims are directed to a “process” and therefore fall into one of the broad statutory categories of patent-eligible subject matter under 35 U.S.C. § 101. *See* App. Br. 10. We consequently next turn to determining whether this process is patent eligible or comes under one of the nonstatutory exceptions to Section 101.

In performing such a patentability analysis under 35 U.S.C. § 101, we follow the framework set forth by the Supreme Court in *Mayo Collaborative Servs. v. Prometheus Labs., Inc.*, 566 U.S. 66 (2012). As a first step, we determine whether the claims at issue are directed to a patent-ineligible concept, i.e., a law of nature, a phenomenon of nature, or an abstract idea. *Mayo*, 566 U.S. at 70–71. If the claims are so directed, we next consider the elements of each claim both individually and “as an ordered combination” to determine whether additional elements “transform the nature of the claim” into a patent-eligible application. *Id.* at 78–79; *see also Ariosa Diagnostics, Inc. v. Sequenom, Inc.*, 788 F.3d 1371, 1375 (Fed. Cir. 2015). Specifically, the Supreme Court considered this second step as determining whether the claims recite 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.” *Mayo*, 566 U.S. at 72–73.

The Examiner has concluded that Appellant’s claims are directed to a method of “information management” that constitutes an abstract idea and which are consequently patent ineligible. The Supreme Court “has not established a definitive rule to determine what constitutes an ‘abstract idea.’”

Enfish, LLC v. Microsoft Corp., 822 F.3d 1327, 1334 (Fed. Cir. 2016) (citing *Alice Corp. Pty. Ltd. v. CLS Bank Int'l*, 134 S. Ct 2347, 2357 (2014)). Our reviewing court has held that information, as such, is intangible, and the collecting of information, including when limited to particular content (which does not change its character as information), is within the realm of abstract ideas. See *Elec. Power Grp., LLC v. Alstom S.A.*, 830 F.3d 1350, 1353–54 (Fed. Cir. 2016) (collecting cases); see also *In re Grams*, 888 F.2d 835, 840 (Fed. Cir. 1989) (“The presence of a physical step in the claim [i.e., performing clinical tests on individuals] to derive data for the algorithm will not render the claim statutory”). The Federal Circuit has similarly treated the analyzing of information by steps that a person is capable of performing mentally, or via mathematical algorithms, without more, as essentially mental processes falling within the abstract idea category. *Elec. Power Grp.*, 830 F.3d at 1353–54. Furthermore, the court has held that the mere presentation of the results of abstract processes of collecting and analyzing information, without more, is abstract, as an ancillary part of such collection and analysis. *Id.*

Appellant’s claims are directed to the selection and administration of a structured test based upon a desired result and the selection of various contextual criteria. See Spec. ¶¶ 32–36. By way of example, Appellant’s Specification discloses that:

For instance, a patient that typically enjoys an evening snack may choose to investigate the effect of their evening snack on the morning fasting value. The system would then present the user with a prioritized list of contextual criterion including the amount of their insulin administration, whether they consumed alcohol, the size of their snack, and the like. The user may then select the contextual criteria from the list that they would like to

evaluate, and deselect those from the list that they would not. Collectively or individually, the contextual criterion can be thought of as a “variable under test.” In other instances, a patient may select contextual criteria pertaining to exercising (such as the duration of exercise) but not snacking, or select contextual criteria pertaining to both snacking and exercising.

Spec. ¶ 35. We agree with the Examiner that Appellant’s claims are directed to the organization and management of information and, as such, are directed to an intangible, and consequently abstract, idea. *See Elec. Power Grp.*, 830 F.3d at 1353–54.

We therefore turn to the second portion of the *Mayo* test to inquire whether the claims add “significantly more” than the abstract idea itself. We conclude that they do not. The limitations of claim 1, for example, recite: (1) identifying a test template that corresponds to an objective for a structured test; (2) presenting the patient with a plurality of contextual criteria for the identified test template; (3) receiving the contextual criteria selected by the patient; (4) constructing a structured test in accordance with the selected contextual criterion and the identified test template; and (5) administering, by the diabetes management device, the structured test to the patient, including prompting the patient to provide a sample of blood to a glucose meter. All of these steps, with the exception of the data collection step (i.e., administering the test, including prompting the patient to provide a sample of blood to a glucose meter) constitute no more than the manipulation of information in order to design an appropriate test. These information management steps could be carried out in the human mind, or with the aid of pencil and paper, and therefore are directed to a patent-

ineligible abstract idea. *See, e.g., CyberSource Corp. v. Retail Decisions, Inc.*, 654 F.3d 1366 (2011).

Furthermore, all of these information management steps can be carried out in a “module,” defined by Appellant’s Specification as comprising:

[A]n Application Specific Integrated Circuit (ASIC); an electronic circuit; a combinational logic circuit; a field programmable gate array (FPGA); a processor (shared, dedicated, or group) that executes code; other suitable components that provide the described functionality; or a combination of some or all of the above, such as in a system-on-chip. The term module may include memory (shared, dedicated, or group) that stores code executed by the processor.

Spec. ¶ 66. Appellant’s Specification thus discloses that the steps recited in the claims can be carried out by, *inter alia*, a generic processor running software and other similar devices well known in the art.

Appellant analogizes the claims on appeal to those in *Trading Techs.* and *McRO*; however, we find Appellant’s reliance upon these cases to be misplaced. In *Trading Techs.*, the Federal Circuit agreed with the district court’s finding that the claims require *a specific, structured graphical user interface paired with a prescribed functionality directly related to the graphical user interface’s structure* that is addressed to and resolves a specifically identified problem in the prior state of the art. *Trading Techs.*, 675 F. App’x at 1004. Appellant’s claims are tied to no such specific structure similar to the graphical user interface claimed in *Trading Techs.* Moreover, the court in *Trading Techs* observed that:

Precedent has recognized that specific technologic modifications to solve a problem or improve the functioning of a known system generally produce patent-eligible subject matter. In *DDR*

Holdings, LLC v. Hotels.com, L.P., 773 F.3d 1245 (Fed. Cir. 2014), the court upheld the patent eligibility of claims “necessarily rooted in computer technology” that “overcome a problem specifically arising in the realm of computer networks.” *Id.* at 1257. Similarly, “claimed process[es] us[ing] a combined order of specific rules” that improved on existing technological processes were deemed patent-eligible in *McRO, Inc. v. Bandai Namco Games America Inc.*, 837 F.3d 1299, 1315 (Fed. Cir. 2016). Claims that were “directed to a specific improvement to the way computers operate, embodied in [a] self-referential table,” were deemed eligible in *Enfish, LLC v. Microsoft Corp.*, 822 F.3d 1327, 1334 (Fed. Cir. 2016).

Id. at 1004–05. We find that, contrary to Appellant’s assertions, the claims on appeal are not directed to an improvement in computer technology of the kind that the Federal Circuit has held to be patent eligible, not least because the claims cite no such technology, and because Appellant’s Specification discloses no such improvement to the technology implementing his claimed method, or even any need for more than a generic processor and commercially available software. In other words, we find that the claims are not directed to a method by which computer technology functions may be improved but, rather, are directed merely to a system of information management and presentation by a conventional generic processor and software.

Consequently, we conclude that the claims recite no more than the abstract idea itself, without adding “significantly more” to the abstract idea. We therefore conclude that the claims are directed to patent-ineligible subject matter and we affirm the Examiner’s rejection of the claims.

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Application 13/107,301

DECISION

The Examiner's rejections of claims 1–9 and 20–26 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