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UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

Ex parte PETER TJIN SJOE KONG TSANG

Appeal 2018-001959
Application 13/059,791
Technology Center 3700

Before BRETT C. MARTIN, JEREMY M. PLENZLER, and
JEFFREY A. STEPHENS, *Administrative Patent Judges*.

STEPHENS, *Administrative Patent Judge*.

DECISION ON APPEAL

STATEMENT OF THE CASE

Appellant¹ seeks our review under 35 U.S.C. § 134(a) from the Examiner's Final Office Action (dated Apr. 11, 2017) ("Final Act.") rejecting claims 1, 2, 4–6, 8–11, 13–15, and 17–19.^{2,3} We have jurisdiction under 35 U.S.C. § 6(b).

For the reasons explained below, we do not find error in the rejection. Accordingly, we AFFIRM.

Claimed Subject Matter

Claims 1, 9, and 10 are independent. Claim 1, reproduced below with selected limitations emphasized, illustrates the claimed subject matter.

1. A method for managing the weight of a user, the method, comprising instructions for making a processor perform the steps comprising:
 - a) obtaining a measured amount of energy expended by the user;

¹ The real party in interest is identified as Koninklijke Philips Electronics, N.V. Appeal Br. 3.

² Although the Office Action Summary indicates the action is non-final, Final Act. 1, it was labeled in the electronic file wrapper as a Final Office Action and the conclusion states that it is final, Final Act. 7. The Examiner's Interview Summary dated May 11, 2017 indicates the Examiner confirmed to Appellant's representative that the office action was final.

³ Dependent claims 18 and 19 are not specifically addressed in the Final Office Action. The claims were presented, however, in the Amendment filed March 2, 2017, in response to the non-final rejection dated December 2, 2016. The Final Office Action indicates that the March 2 amendments are entered. Final Act. 2. As noted by Appellant, claims 18 and 19 are also included in the list of rejected claims in the Notice of Panel Decision from Pre-Appeal Brief Review (dated July 17, 2017). *See* Appeal Br. 3. Like Appellant, we consider claims 18 and 19 to be pending and rejected, *see id.*, and we consider them rejected on the same ground as the other dependent claims, *see* Final Act. 3.

b) predicting a target weight that can be reached and a target time period required for achieving the predicted target weight based on the obtained measured amount of energy expended in combination with a current weight of the user;

c) devising a weight management plan for a pre-determined time period, said plan including a disciplined eating pattern and a physical activity pattern, wherein said pre-determined time period is split into a plurality of time slots occurring at known times within said pre-determined time period;

d) coaching the user on a daily basis for the pre-determined time period using the devised weight management plan, said coaching comprising instruction regarding at least one of: eating and activity during each of the time slots; and

e) monitoring progress toward achieving a weight that is to be achieved at an end of the pre-determined time period;

checking whether the user's weight is differing with respect to the weight that is to be achieved at the end of the pre-determined time period; and

revising said weight management plan for a next pre-determined time period by repeating step a, step b, step c and step d, wherein said revised weight management plan considers the user's weight with respect to the weight to be achieved at the end of the next pre-determined time period, where the next pre-determined time period is with respect to said target time period, and a measured physical activity of the user, *wherein said time slots in the next pre-determined time period are altered based on said measured physical activity of the user.*

Rejection

Claims 1, 2, 4–6, 8–11, 13–15, and 17–19 stand rejected under 35 U.S.C. § 101 as directed to non-patent eligible subject matter. Final Act. 2–3.⁴

⁴ As noted in footnote 3, *supra*, claims 18 and 19 stand rejected on the same basis as the other dependent claims listed in the Final Office Action.

DISCUSSION

Appellant argues all claims together as a group. Appeal Br. 11–21. We select claim 1 as representative, and decide the appeal on the basis of claim 1. 37 C.F.R. § 41.37(c)(1)(iv).

An invention is patent-eligible if it claims a “new and useful process, machine, manufacture, or composition of matter.” 35 U.S.C. § 101. Nonetheless, the Supreme Court has long interpreted § 101 to include implicit exceptions: “[l]aws of nature, natural phenomena, and abstract ideas” are not patentable. *E.g.*, *Alice Corp. 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.”).

In *Diamond v. Diehr*, 450 U.S. 175 (1981), 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.” 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 *Gottschalk v. Benson*, 409 U.S. 63 (1972), and *Parker v. Flook*, 437 U.S. 584 (1978)). The Court also indicated, however, that “an *application* of a law of nature or mathematical formula to a known structure or process may well be deserving of patent protection.” *Id.* at 187.

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 (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.* (alterations in original) (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) (“Revised Guidance”). Under that Revised Guidance, we first look to whether the claim recites:

(1) a judicial exception, i.e., a law of nature, a natural phenomenon, or subject matter within the groupings of abstract ideas enumerated in the

Revised Guidance (i.e., mathematical concepts, certain methods of organizing human activity, and mental processes); and

(2) additional elements that integrate the judicial exception into a practical application (*see, e.g.*, MPEP § 2106.05(a)–(c), (e)–(h)).

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 is 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 Revised Guidance.

In this case, the Examiner determines claim 1 is directed to an abstract idea in the form of a method of organizing human activity. Final Act. 2. In particular, the Examiner explains:

[T]he claims are directed to an abstract idea in the form of a method for managing the weight of a user by, *inter alia*, obtaining a measured amount of energy expended by the user, predicting a target weight and target time, devising a weight management plan and a physical activity pattern, coaching the user, and monitoring the user’s progress.

Id. The Examiner analogizes to the claims directed to a system of computerized meal planning in *DietGoal Innovations LLC v. Bravo Media LLC*, 33 F. Supp. 3d 271 (S.D.N.Y. 2014), *aff’d per curiam*, 599 F. App’x 956 (Fed. Cir. 2015) (non-precedential). Final Act. 2–3. The Examiner also

determines the claims do not include additional elements either alone or in combination that are sufficient to amount to significantly more than the judicial exception. *Id.* at 3. The Examiner finds that “[t]o the extent that, e.g., ‘instructions for making a processor,’ ‘sensors,’ and ‘a computer program product’ are claimed these are all generic, well-known, and conventional computerized devices and are claimed to provide generic, well-known, and conventional computerized functions such as executing instructions and sensing values.” *Id.*

Appellant argues “the subject matter claimed provides significantly more in the field of organizing human activity (i.e., weight management) than the abstract idea of organizing human activity or weight management.” Appeal Br. 11. Appellant summarizes claim 1 as follows:

The invention claimed in the instant matter, as recited in claim 1, provides a method for providing instruction to a user to manage the weight of the user by constructing a plan that determines a desired weight to be achieved at each of a plurality of time periods, wherein each predetermined period includes at least one time slot. The time slots are used to define periods of eating and/or activity. The method further adjusts or re-determines the plan at the end each predetermined period to determine whether the user has achieved the corresponding desired weight. The adjusted or re-determined plan includes the further adjustment to the time slots within the next predetermined time period in order to limit the periods a user is to eat and/or exercise.

Id. at 12.

Appellant disagrees with the Examiner’s comparison to the claims in *DietGoal*, arguing that “independent claim 1, recited in the instant matter, when read, as a whole, recites elements that represent building blocks that are unlike the patent ineligible subject matter recited in *Dietgoal*.” Appeal

Br. 13; *see* Reply Br. 6–9. And, although the Examiner does not rely on *Ultramercial, Inc. v. Hulu, LLC*, 772 F.3d 709 (Fed. Cir. 2014), Appellant argues claim 1 in this case is similarly unlike the patent ineligible subject matter in *Ultramercial*. Appeal Br. 14. Appellant contends that claim 1 is different than the ineligible subject matter in *DietGoal* and *Ultramercial* because “the subject matter claimed in the instant application does not merely provide a sequence of conventional steps specified at a high level of generality.” *Id.* at 16. For support, Appellant notes that claim 1 requires “revising said weight management plan for a next pre-determined time period by repeating step a, step b, step c and step d,” and particularly emphasizes the final wherein clause reciting “*wherein said time slots in the next pre-determined time period are altered based on said measured physical activity of the user.*” *Id.*

Appellant also argues the sequence of claimed steps in this case represents a process similar to that recited in *Diamond v. Diehr*, 450 U.S. 175 (1981). Appeal Br. 16; Reply Br. 10–11. Appellant notes that the claim for operating a rubber-molding press in *Diehr* included steps of constant temperature measurement, repetitive recalculation, comparison of measured temperature with expected temperature, and opening the press at a desired time. Appeal Br. 17. Appellant contends “the repetitive calculation provided the element that transformed patent ineligible subject matter (i.e., the use of an algorithm) into patent eligible subject matter (i.e., the use of an algorithm in the specific process of curing rubber).” *Id.* at 18. Appellant argues “the claims of the instant application provide an improved, unconventional, iterative method for weight program management that when taken as a whole, includes additional features that recite an unconventional

means to coach a user to manage their weight by adjusting time slots in which the user performs designated activities.” *Id.* at 19. Appellant further contends that the elements recited in claim 1 do not preempt all computer-implemented processes for weight management. *Id.* at 19–21.

We agree with the Examiner that claim 1 recites a method of organizing human activity. The purpose of the method is “managing the weight of a user,” and includes: (1) data gathering steps such as “obtaining a measured amount of energy expended by the user,” “monitoring progress toward achieving a weight that is to be achieved at an end of the pre-determined time period,” and “checking whether the user’s weight is differing with respect to the weight that is to be achieved”; (2) calculation and planning steps such as “predicting a target weight that can be reached and a target time period required for achieving the predicted target weight” based on data gathered, “devising a weight management plan for a pre-determined time period” (wherein the time period “is split into a plurality of time slots”), and “revising said weight management plan for a next pre-determined time period by repeating” certain steps and where the “time slots in the next pre-determined time period are altered based on said measured physical activity of the user”; and (3) an instructional step of “coaching the user on a daily basis for the pre-determined time period using the devised weight management plan,” and where the coaching comprises “instruction regarding at least one of: eating and activity during each of the time slots.” The method falls within the “certain methods of organizing human activity” grouping of abstract ideas in the Revised Guidance because it is a method of managing personal behavior, specifically behavior relating to eating and

activity, for the purpose of weight management.⁵ The mere nominal recitation of instructions for making a processor perform the steps do not take the claim out of the methods of organizing human activity grouping. Thus, claim 1 recites an abstract idea.

We also determine that claim 1 does not recite additional elements that integrate the judicial exception into a practical application, which informs our inquiry into whether claim 1 is “directed to” the identified abstract idea. The claim as a whole merely describes how to generally “apply” the data gathering, calculation and planning, and instructional steps of the claim described above to manage personal behavior. The “processor” is recited at a high level of generality and is merely invoked as a tool to perform the process of managing the weight of the user.

Appellant’s argument that the steps in claim 1 are not merely a sequence of conventional steps specified at a high level of generality, Appeal Br. 16, does not inform us of error. Whether or not each of the claimed steps is conventional in weight management techniques, the steps emphasized by Appellant, *id.*, are a part of the abstract idea of managing the personal behavior of the user. In particular, revising the weight management plan and altering the time slots in the next predetermined period based on the measured physical activity of the user are germane to the human activity aspect of the claim, and do not overcome any particular problem in applying the method in a computer environment. For example, as described in the Specification, “the method gives [users] a wide window at the start of the

⁵ Comparison to the claims at issue in the district court opinion in *DietGoal*, which was affirmed by the Federal Circuit without opinion, is not necessary to our determination.

trajectory and gradually narrows down the eating and snacking times so that the body can adjust to the times without causing too much disruption and discomfort to the user.” Spec. 13:5–7. Similarly, if the user has a high activity level, eating time slots may be increased. *See id.* at 13:13–19. As Appellant acknowledges, “by changing of the routine and adjusting the program over time, the user is less likely to fail, become discouraged or quit.” Appeal Br. 19. For these reasons, we are not persuaded by Appellant that the claimed method is most similar to the method of molding rubber products in *Diehr*, which the Court determined applied a formula in a process that is “performing a function which the patent laws were designed to protect.” *Diehr*, 450 U.S. at 192.

For similar reasons, we are not informed of error by Appellant’s contention in the Supplemental Appeal Brief (“Supp. Br.”) that *Finjan, Inc. v. Blue Coat Systems, Inc.*, 879 F.3d 1299 (Fed. Cir. 2018), supports a conclusion of patent-eligible subject matter here. *See* Supp. Br. 5–10. Appellant contends the claims in *Finjan* recited “how” to achieve a desired result, and that *Finjan* distinguished cases in which claims merely recite an achieved result. Supp. Br. 6–7. Appellant argues “the independent claims of the instant matter assertively recite a particular concrete solution in the managing a user’s habits,” and, in particular, “recite the specific element of adjusting periods a user is instructed to perform activities in a next time period based on the goals achieved at the end of current time period.” *Id.* at 7. As Appellant recognizes, *id.* at 7–8, in *Finjan* the court determined that “the method of claim 1 employs a new kind of file that enables a computer security system to do things it could not do before,” and describes ways in which “[t]he asserted claims are therefore directed to a non-abstract

improvement in computer functionality, rather than the abstract idea of computer security writ large,” *Finjan*, 879 F.3d at 1305. Although claims limited to “how” to improve computer functionality may recite patent-eligible subject matter, as illustrated by *Finjan*, Appellant’s claimed steps of adjusting periods a user is instructed to perform activities in a next time period based on the goals achieved at the end of current time period are intended to improve user compliance with the method of managing human behavior, and are not an improvement in computer functionality.

As part of step two of *Alice*, we look to whether claim 1 (a) adds a specific limitation or combination of limitations beyond the judicial exception that are not “well-understood, routine, conventional” activity in the field, or (b) simply appends well-understood, routine, conventional activities previously known to the industry, specified at a high level of generality, to the judicial exception. As noted previously, the claim as a whole merely describes how to generally apply the process of managing human personal behavior. Thus, even when viewed as a whole, nothing in the claim adds significantly more (i.e., an inventive concept) to the abstract idea of managing this human behavior.

In light of our analysis herein, Appellant’s additional arguments regarding a lack of preemption also are not sufficient to inform us of error in the Examiner’s determination that claim 1 recites patent ineligible subject matter.

Accordingly, for the reasons discussed above and by the Examiner, we are not informed of error in the Examiner’s rejection of representative claim 1 under 35 U.S.C. § 101. For the same reasons, we sustain the

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rejection of claims 2, 4–6, 8–11, 13–15, and 17–19, which are rejected on the same ground and not argued separately.

DECISION

We affirm the Examiner's decision to reject claims 1, 2, 4–6, 8–11, 13–15, and 17–19 under 35 U.S.C. § 101.

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).

AFFIRMED