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UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

Ex parte DAVID A. REAVY

Appeal 2018-005039
Application 13/844,681
Technology Center 3700

Before JENNIFER D. BAHR, JAMES P. CALVE, and
WILLIAM A. CAPP, *Administrative Patent Judges*.

CAPP, *Administrative Patent Judge*.

DECISION ON APPEAL

STATEMENT OF THE CASE

Appellant seeks our review under 35 U.S.C. § 134(a) of the final rejection of claims 21, 25, and 26 under 35 U.S.C. § 101 either: (1) as claiming non-statutory (and, therefore, unpatentable) subject matter; or, in the alternative, (2) as directed to a judicial exception to patent eligible subject matter. We have jurisdiction under 35 U.S.C. § 6(b).

We AFFIRM.

THE INVENTION

Appellant's invention involves evaluating and manipulating the musculature of the human body. Spec. 2. Claim 25, reproduced below, is illustrative of the subject matter on appeal.

25. A method of working with a subject's body, comprising the steps of:

a. a tester performing in order tests i-v on the subject's lower body and/or in order tests i-iv on the subject's upper body, wherein in each test the subject assumes a test position and then attempts to maintain the test position while the tester attempts to move the subject from the test position, and wherein during at least one test the subject's tissue is restricted so that the subject cannot maintain the test position;

b. the tester releasing all restrictions in said restricted tissue with at least manual pressure to relax and lengthen the tissue;

c. the tester re-performing the test, wherein the subject again cannot maintain the test position; and

d. activating tested tissue with at least palpation and/or lengthening exercise;

wherein said tests for the subject's lower body comprise:

- i. a supine bilateral hip abduction test,
- ii. a supine straight leg raise test,
- iii. a prone straight leg raise test,
- iv. a side-lying leg abduction test, and
- v. a side-lying leg adduction test;

and wherein said tests for the subject's upper body comprise:

- i. a supine shoulder adduction test,
- ii. a supine horizontal shoulder adduction test,
- iii. a side lying shoulder abduction test, and
- iv. a prone shoulder horizontal abduction test.

OPINION

The controlling statute provides that “[w]hoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.” 35 U.S.C. § 101. The Courts recognize certain judicial exceptions to Section 101, namely: (1) laws of nature, (2) natural phenomena, and (3) abstract ideas. *See Mayo Collaborative Svc. v. Prometheus Labs., Inc.*, 566 U.S. 66, 70–71 (2012).

The Supreme Court has set forth “a framework 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. Pty. Ltd. v. CLS Bank Int’l*, 573 U.S. 208, 217 (2014) (citing *Mayo*, 566 U.S. at 72–73). According to the Supreme Court’s framework, we must first determine whether the claims at issue are directed to one of those concepts. *Id.* If so, we must secondly “consider the elements of each claim both individually and ‘as an ordered combination’ to determine whether the additional elements ‘transform the nature of the claim’ into a patent-eligible application.” *Id.*

The Supreme Court characterizes the second step of the analysis as “a search for an ‘inventive concept’ — *i.e.*, 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*, 573 U.S. at 217–18 (brackets in original) (quoting *Mayo*, 566 U.S. at 72–73).

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) (“*2019 Guidelines*”). Under such guidelines, in conducting step one of the *Alice* framework, we first look to whether the claim recites:

(1) any judicial exceptions, including certain groupings of abstract ideas; and

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

See 2019 Guidelines, 84 Fed. Reg. 50, 52, 53–55.

Claim 25

Statutory Subject Matter

In the instant case, the Examiner finds that claim 25 fails to fall into one of the statutory categories under 35 U.S.C. § 101 because claim 25 is not a process, machine, manufacture, or composition of matter. Final Action 3. In particular, the Examiner finds that, although physical steps are recited in claim 25, there is no recitation of a particular machine or apparatus and there is no transformation of an article into a different state or thing. *Id.* at 3–4. More particularly, the Examiner rejects the notion that a human body may undergo “transformation” for purposes of a Section 101 analysis. *Id.* at 4.

Appellant argues that claim 25 falls under the statutory category of a “process.” Appeal Br. 9–10. Appellant argues that Section 101 should be interpreted broadly to allow inventors to benefit from their inventions. *Id.* at 11, 15 (citing *Bilski v. Kappos*, 561 U.S. 593 (2010)). Appellant recites the following definition of process.

The term “process” means process, art, or method, and includes a new use of a known process, machine, manufacture, composition of matter, or material.

Id. (quoting 35 U.S.C. § 100(b)). Appellant emphasizes that claim 25 recites “physical” steps. Appeal Br. 13.

The method of pending claim 25 includes a series of specific steps as required under Section 101. Multiple upper body and/or lower body tests are performed in a specific order by a tester on a subject, allowing the tester to release restrictions in the subject and activate dormant muscles, achieving results for instance as discussed in the Claim Summary above, including optimizing the subject’s physical performance and efficiency and avoiding or overcoming pain or injury in the subject.

Id. at 15. Appellant argues that *Bilski* rejected the “machine or transformation” test as the sole and definitive test for patentable subject matter. *Id.* at 16.

In response, the Examiner points out that, for purposes of statutory subject matter under section 101, Appellant’s process is no more of a process than a person waving their hand. Ans. 6.

In reply, Appellant argues that the claimed steps “transform” a person’s body and, therefore, satisfies the machine or transformation test for statutory subject matter. Reply Br. 2–6.

Over the years, precisely defining the term “process” as used in Section 101 has proven to be an elusive concept. The Supreme Court, in *Bilski*, determined that the “machine-or-transformation” test is a useful and important investigative tool for determining whether some claimed inventions are processes under Section 101. *Bilski*, 561 U.S. at 604. However, the Court held that the machine-or-transformation is not the sole test for deciding whether an invention is a patent eligible process. *Id.* Thus, we are unable to determine that claim 25 is not a patent eligible process simply because it fails the machine-or-transformation test.

The majority opinion in *Bilski* recognized that patent law faces a great challenge in striking the balance between protecting inventors and not granting monopolies over procedures that others would discover by independent, creative application of general principles. Nothing in this opinion should be read to take a position on where that balance ought to be struck.

Id. at 606. Thus, the *Bilski* majority declined to give us a precise definition of “process” for purposes of Section 101. *Id.* Instead, the Court narrowly held that the Section 101 meaning of “process” does not categorically exclude business methods. *Id.*

[T]he Patent Act leaves open the possibility that there are at least some processes that can be fairly described as business methods that are within patentable subject matter under § 101.

Id. at 609. Ultimately, the *Bilski* Court resolved the case before it on a narrow basis, determining that the patent application at issue falls outside of Section 101 because it claims a judicial exception to the statutory subject matter of Section 101 in the form of an abstract idea. *Id.*

The *Bilski* decision is accompanied by a concurrence written by Justice Stevens and joined by three other members of the Court. *Id.* at 613. Although the concurrence does not constitute precedent that dictates the result of our Decision here today, it makes several observations that shed some light on the case before us. First, it observes that the term “process” has accumulated a distinctive meaning in patent law. *Id.* at 623 (Stevens, J., concurring). Second, the concurrence observes that, when the term was used in the 1952 Patent Act, it was neither intended nor understood to encompass *any* series of steps or *any* way to do *any* thing. *Id.* In particular, with respect to whether “process” should be understood in accordance with its ordinary and customary meaning, the concurrence observes that

Indeed, [such an] approach would render § 101 almost comical. A process for training a dog, a series of dance steps, a method of shooting a basketball, maybe even words, stories, or songs if framed as the steps of typing letters or uttering sounds—all would be patent eligible.

Id. at 624.

Turning to the instant case, claim 25 requires two human beings to interact in performing the claimed method: (1) a tester; and (2) a subject. Claims App. The two persons engage in physical contact with each other to “relax and lengthen” the subject’s tissue. *Id.* The Examiner observes, correctly, that the claim fails the machine-or-transformation test. Final Action 3–4.¹ However, *Bilski* precludes our reliance on the machine-or-transformation test as determinative of the outcome here. On the other hand, we find unpersuasive Appellant’s argument that merely reciting “physical steps” is enough to confer subject matter eligibility. Appeal Br. 15. Using that logic, claiming a “series of dance steps” would be patent-eligible. *Bilski*, 561 U.S. at 624 (Stevens, J., concurring) (explaining that such an approach to Section 101 is “almost comical”).

In the absence of any clear guidance from the Federal Circuit or Supreme Court as to whether two persons engaging in physical steps of

¹ We have considered Appellant’s argument that the method of claim 25 “transforms” the human body and conclude that such argument lacks merit. Reply Br. 2–6. The human body remains the human body before, during, and after application of the claimed method. *See Bilski*, 561 U.S. at 604 (explaining that transformation entails transforming or reducing subject matter to a different state or thing (citing *Cochrane v. Deener*, 94 U.S. 780 (1877), and *Gottschalk v. Benson*, 409 U.S. 63 (1972))). A person is no more “transformed” by the muscle relaxation techniques of claim 25 than a tired and sleepy person is “transformed” by receiving a good night’s rest or a hungry person is “transformed” by eating a nutritious meal.

touching each other constitutes patent eligible subject matter as a “process,” we elect to decide this case on the Examiner’s alternative reasoning that the claimed subject matter falls within a judicial exception to Section 101.

Judicial Exception

Section 101 contains an important implicit exception, namely, that laws of nature, natural phenomena, and abstract ideas are not patentable. *Mayo*, 566 U.S. at 70. In that regard, the Examiner alternatively finds that claim 25 falls under a judicial exception to Section 101, namely, a natural phenomenon. Final Action 3. The Examiner, furthermore, finds that the claim fails to recite something “significantly more” under step 2B of the *Alice/Mayo* analysis. *Id.* at 4 (citing *Funk Bros. Seed Co. v. Kalo Inoculant Co.*, 333 U.S. 127 (1948)).

Under the *2019 Guidelines*, in conducting step one of the *Alice* framework, we first look to whether the claim recites:

- (1) any judicial exceptions, including certain groupings of abstract ideas; and
- (2) additional elements that integrate the judicial exception into a practical application.²

Step 1, Prong 1

With respect to the first prong, the Examiner determines that the claims are directed to natural phenomena of human organisms. Final Action 3. According to the Examiner:

The entire claim recites natural phenomena from a subject assuming a certain position, to the tester releasing restricted tissue, to performing a specific set of exercises/tests, to palpation of the subject’s body by the human tester. These

² We will refer to sub-paragraphs (1) and (2) as “prongs” under step 1 of the *Alice/Mayo* analysis.

steps are all natural phenomena because movement of the human body is a natural phenomena. Human beings move their bodies in nature and there is no human ingenuity that is required for a human brain to tell a human muscle to move.

Id. at 4. In the Answer, the Examiner expands on the foregoing, additionally finding that the steps a person takes to palpate and move another person's body amounts to a method of organizing human activity. Ans. 7.

Appellant argues that the patent laws provide for patenting processes that entail human activity. Appeal Br. 19. Appellant relies on 35 U.S.C. § 287(c)(2)(A) for the proposition that medical and surgical treatment do not fall within a judicial exception to Section 101. *Id.* at 19–21 (citing *Rapid Litig. Mgt. Ltd. v. CellzDirect, Inc.*, 827 F.3d 1042 (2016)).

In response, the Examiner states that the recited subject matter in the claims, such as performing upper and lower body tests, releasing restrictions with manual pressure, and palpation are steps of human behavior. Ans. 8.

In reply, Appellant reiterates that the claimed invention is not directed to natural phenomena and, in support thereof, merely directs us back to pages 18–27 of the Appeal Brief. Reply Br. 7. Appellant further criticizes the Examiner for focusing on “parts” of the claimed invention, without considering the entirety of the claim as a whole. *Id.* Appellant then lists a number of exemplary case authorities dealing with natural phenomena and asserts that the instantly claimed method bear “no resemblance” to the natural phenomena or laws of nature in the listed cases. Similarly, Appellant attempts to distinguish the instant claim from case authorities dealing with managing human behavior in the form of: (1) testing a patient's nervous system; and (2) meal planning. *Id.* at 10.

There is little question here that claim 25 recites a natural phenomenon or a law of nature. The claim relates to relaxing restricted tissue. Claims App. “Tissue” is understood in the context of a person’s (subject’s) upper and/or lower body. *Id.* The Specification provides additional context that the human tissue involved is the muscular system of the human body. Spec. 1–2.

Skeletal muscles in the body aid in movement, support posture, and engage in other activities. For a muscle to function properly, and in particular at its maximum force, the muscle must be able to relax and assume its correct resting length and tension level. Correct resting length and tension are also important in optimal joint function If a muscle contracts and cannot relax fully, remaining at least partially contracted over time, it becomes “tight”, or restricted. The restricted muscle cannot shorten enough or lengthen enough to provide full strength, and can become resistant to movement.

Id. at 1. Specifically, claim 25 recites: (a) performing tests on a human body; (b) releasing tissue restrictions in the human body; (c) re-testing the human body; and (d) activating human body tissue with palpation or exercise. Claims App.

Human body tissue exists in nature. How muscles respond to exercise and stretching activities, etc., is a natural phenomenon. Appellant did not invent muscles. At most, Appellant has discovered how muscles respond to exercise, manual pressure, and palpation.

Similarly, there is no real question that claim 25 recites an abstract idea in the form of a certain method of organizing human activity, namely, managing personal behavior, relationships, or interactions between people. The claim recites two persons: (1) a tester; and (2) a subject. The claim requires the tester to interact with the subject by performing tests on the

subject's body. Claims App., claim 25. The tests are performed "in order." *Id.* The tester applies manual pressure to relax and lengthen the subject's tissue. *Id.*

Thus, the claim recites at least two judicial exceptions under Section 101: (1) natural phenomena; and (2) an abstract idea in the form of a certain method of organizing human activity, namely, managing interactions between people.

Step 1, Prong 2

Under Prong 2 of step 1 of the *2019 Guidelines*, we do not assume that such claims are directed to patent ineligible subject matter because "all inventions [at some level] embody, use, reflect, rest upon, or apply laws of nature, natural phenomena, or abstract ideas." *In re TLI Commc'ns LLC Patent Litig.*, 823 F.3d 607, 611 (Fed. Cir. 2016) (quoting *Alice*, 573 U.S. 217). Instead, "the claims are considered in their entirety to ascertain whether their character as a whole is directed to excluded subject matter." *McRO, Inc. v. Bandai Namco Games America Inc.*, 837 F.3d 1299, 1312 (Fed. Cir. 2016) (citation omitted). If the claims are not directed to a judicial exception, the inquiry ends. *2019 Guidelines*. If the claims are "directed to" a judicial exception, then the inquiry proceeds to the second step of the *Alice* framework. *Id.*

Consequently, we consider whether the claimed method of working with a subject's body includes additional elements that integrate the judicial exception into a practical application. A claim that integrates a judicial exception into a practical application will apply, rely on, or use the judicial exception in a manner that imposes a meaningful limit on the judicial

exception, such that the claim is more than a drafting effort designed to monopolize the judicial exception. *2019 Guidelines*.

Here, Appellant argues that claim 25 does more than observe or identify an ineligible concept in the form of muscle movement. Appeal Br. 22. Appellant asserts that a series of “concrete steps” is carried and results in “benefits” to the subject. *Id.*

[C]laim 25 is directed to a new and useful process of working with or treating the subject’s body – claim 25 is not directed to the subject’s body, muscles, or muscle movements. It is the claim as a whole – the process of working with the body (claim 25), of treating the body (claim 26), and the series of concrete steps required for the process – that renders claims 25 and 26 patent eligible

Id. at 23.

We fail to see how one person (a tester) touching another person (a subject) in a certain manner and a certain order amounts to a “practical application” of a judicial exception, whether a natural phenomenon or an abstract idea. Relaxation of a muscle (tissue) is a natural phenomenon. Discovering particular circumstances of how and when to apply manual pressure and palpation and in what order to relax a muscle is merely part of that natural phenomenon. Furthermore, dictating the manner and order of one person touching another is simply managing human activity, which is an abstract idea. “Phenomena of nature, though just discovered, . . . and abstract intellectual concepts are not patentable, as they are the basic tools of scientific and technological work.” *Mayo*, 566 U.S. at 71 (quoting *Benson*, 409 U.S. at 67); *see also Athena Diagnostics, Inc. v. Mayo Collaborative Services, LLC*, 915 F.3d 743, 751 (Fed. Cir. 2019) (explaining that claimed advance is only a discovery of a natural law and that additional recited steps

only apply conventional techniques to detect that natural law); *see also Cleveland Clinic Foundation v. True Health Diagnostics LLC*, 859 F.3d 1352, 1361 (Fed. Cir. 2017) (finding that a method that starts and ends with naturally occurring phenomena with no meaningful non-routine steps in between is directed to a natural law).

Claim 25, thus, fails to integrate the judicial exception into a practical application and, therefore, is “directed to” a judicial exception.

Step 2

Turning to step 2 of the *Alice/Mayo* analysis, we look more precisely at what the claim elements add in terms of whether they identify an “inventive concept” in the application of the ineligible matter to which the claim is directed to. *See SAP Am., Inc. v. InvestPic, LLC*, 898 F.3d 1161, 1167 (Fed. Cir. 2018), *petition for cert. filed*, No. 18-1199 (U.S. Mar. 14, 2019). “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].’” *Alice*, 573 U.S. at 221 (alterations in original) (quoting *Mayo*, 566 U.S. at 77–78). Those “additional features” must be more than well-understood, routine, conventional activity. *Mayo*, 566 U.S. at 79.

Under step two of the *Alice/Mayo* framework, the Examiner determines that Appellant’s muscle relaxation method, considered both individually and in combination, does not amount to significantly more than the abstract idea. Final Action 4. Specifically, the Examiner finds:

Human beings move their bodies in nature and there is no human ingenuity that is required for a human brain to tell a human muscle to move. For step 2B there is nothing significantly more about the claimed subject matter. . . . [T]he

discovery of a mixture of human movements, which are natural phenomena, results in a natural phenomena ineligible for patent protection.

Id. at 4–5.

Appellant argues:

[O]ne inventive concept of the methods of claims 25 and 26 lies in the order of the claimed tests, which is necessary to ultimately activate latent muscles that are causing imbalance and potential injury to the body. Also, regarding the concern that “something more” is not present, it is respectfully submitted that the order of the tests and steps of the claims defines a process encompassing far more than the identified phenomenon of human activity and muscle movement.

Overall, as discussed in the Claim Summary above, the steps of the claims lead to improved musculature, well-being, and health of the subject . . .

[C]laim 25 is directed to a method of working with the body through a series of steps taken in a specific, new, non-obvious order, applying the inventor’s knowledge and understanding of physical therapy to the subject, to a new and useful end. In the present method, the tester and subject work together to perform a first, a second, then a third, and at least also a fourth specific test on a subject’s body, remove restrictions, retest and activate muscles, to ultimately improve the well-being of the subject.

Appeal Br. 24–26.

Appellant’s arguments are not persuasive. What Appellant points to as “inventive” is just the abstract idea itself. Appeal Br. 14–15. We may assume that the techniques claimed are “[g]roundbreaking, innovative, or even brilliant,” but that is not enough for eligibility. *SAP Am.*, 898 F.3d at 1163 (quoting *Ass’n for Molecular Pathology v. Myriad Genetics, Inc.*, 569 U.S. 576, 591 (2013)). Appellant’s steps of performing tests in a certain order, applying manual pressure to release muscle restrictions, and engaging in palpation and/or exercise to activate tissue merely instruct one person to

“apply” the natural phenomenon that muscles relax under certain conditions. Similarly, the steps merely instruct one person to “apply” the abstract idea of touching another person in a certain manner.³

We have considered Appellant’s remaining arguments and find them to be without merit. Accordingly, for the above reasons, the recited elements of claim 25, considered individually and as an ordered combination, do not constitute an “inventive concept” that transforms claim 25 into patent-eligible subject matter. On this record, we affirm the Examiner’s Section 101 rejection of claim 25.

Claim 26

Claim 26 is an independent claim that is substantially similar in scope to claim 25 with the primary difference being that the preamble of claim 25 recites a method of working with a subject’s body and the preamble of claim 26 recites a method of treating injury or pain in a subject’s body. Claims App.

The Examiner determines that claim 26 fails for similar, if not the same, reasoning as that of claim 25. Final Action 5. In traversing the rejection, Appellant relies on the same arguments that we considered and found unpersuasive with respect to claim 25 and we find are equally unpersuasive here. Appeal Br. 17, 18, 23, 24, 26.

Our reasoning, analysis, and conclusion of unpatentability applied to claim 25 apply with equal force to the Examiner’s rejection of claim 26.

³ It does not matter how innovative Appellant’s abstract idea is. *SAP Am.*, 898 F.3d at 1163. “[A] claim for a *new* abstract idea is still an abstract idea.” *Synopsys, Inc. v. Mentor Graphics Corp.*, 839 F.3d 1138, 1151 (Fed. Cir. 2016).

Thus, for similar reasons expressed above with respect to claim 25, we affirm the Examiner's Section § 101 rejection of claim 26.

Claim 21

Claim 21 depends from claim 25 and recites an instructive course comprising certain material that describes how to perform the method of claim 25. Claims App. The Examiner determines that claim 21 fails for similar, if not the same, reasoning as that of claim 25 and further finds that the claimed instructional material constitutes post-solution activity that is not sufficient to transform unpatentable natural phenomena into a patent-eligible application. Final Action 5 (citing *Parker v. Flook*, 437 U.S. 584 (1978)).

In traversing the rejection, Appellant argues that a mode of teaching is not something that occurs in nature. Appeal Br. 27.

Our reasoning, analysis, and conclusion of unpatentability applied to claim 25 apply with equal force to the Examiner's rejection of claim 21. We agree with the Examiner that providing an instructive course with training material is post-solution activity that does not amount to "significantly more" than natural phenomenon and/or abstract idea embodied in the claim.

[A] process that focuses upon the use of a natural law also contain other elements or a combination of elements, sometimes referred to as an "inventive concept," sufficient to ensure that the patent in practice amounts to significantly more than a patent upon the natural law itself.

Mayo, 566 U.S. at 72–73.

[T]he prohibition against patenting abstract ideas "cannot be circumvented by attempting to limit the use of the formula to a particular technological environment" or adding "insignificant postsolution activity."

Bilski, 561 U.S. at 610–11 (citation omitted).

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Thus, for similar reasons expressed above with respect to claim 25, we affirm the Examiner's Section 101 rejection of claim 21.

DECISION

The decision of the Examiner to reject claims 21, 25, and 26 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