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UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

Ex parte MICHAEL J. COLEMAN and MATTHEW D. WHITBOURNE¹

Appeal 2017-005313
Application 14/878,807
Technology Center 2400

Before ERIC B. CHEN, JEREMY J. CURCURI, and NABEEL U. KHAN,
Administrative Patent Judges.

CHEN, *Administrative Patent Judge.*

DECISION ON APPEAL

¹ According to Appellants, the real party in interest is International Business Machines Corporation. (App. Br. 1.)

This is an appeal under 35 U.S.C. § 134(a) from the final rejection of claims 21–40. Claims 1–20 have been cancelled. We have jurisdiction under 35 U.S.C. § 6(b).

We affirm and enter a new ground of rejection pursuant to our authority under 37 C.F.R. § 41.50(b).

STATEMENT OF THE CASE

Appellants' invention relates to advanced notification of workload, including identifying a reference to a second website for posting by a first website, analyzing information associated with the first website to determine whether the reference to the second website will cause an increase in workload to the second website, and communicating an alert indicating the increase in workload to the second website. (Abstract.)

Claims 21 and 35 are exemplary, with disputed limitations in italics:

21. A method of providing advanced notification of workload, comprising:

identifying a reference to a second website provided to a first website for posting by the first website;

analyzing information associated with the first website to determine whether the reference will cause an increase in workload to the second website;

communicating, responsive to determining the reference will cause the increase in workload, an alert to one of

the second website, or

an entity that manages the second website.

35. A computer program product for providing advanced notification of workload, comprising:

a *computer-readable storage medium* having stored thereon program code that, when executed, configures a processor to perform the following executable operations:

identifying a reference to a second website provided to a first website for posting by the first website;

analyzing information associated with the first website to determine whether the reference will cause an increase in workload to the second website;

communicating, responsive to determining the reference will cause the increase in workload, an alert to one of
the second website, or
an entity that manages the second website.

Claims 21–40 stand rejected under 35 U.S.C. § 101 as being directed to non-statutory subject matter.

Claims 21–36 stand rejected under the judicially created doctrine of obviousness-type double patenting as unpatentable over claims 1–16 of commonly owned Coleman (US 9,195,564 B2; iss. Nov. 24, 2015).²

Claims 21, 22, 25–29, 32–36, 39, and 40 stand rejected under 35 U.S.C. § 103(a) as unpatentable over Hildebrand (US 2012/0144038 A1; publ. June 7, 2012) and Grigsby (US 2012/0179822 A1; publ. July 12, 2012).

Claims 23, 30, and 37 stand rejected under 35 U.S.C. § 103(a) as unpatentable over Hildebrand, Grigsby, and Sabnani (US 2009/0292680 A1; publ. Nov. 26, 2009).

² Appellants do not present any substantive arguments with respect to the rejection of claims 21–36 under the judicially created doctrine of obviousness-type double patenting. (App. Br. 3 n.1.) Thus, any such arguments are deemed to be waived.

Claims 24, 31, and 38 stand rejected under 35 U.S.C. § 103(a) as unpatentable over Hildebrand, Grigsby, and Rowe (US 2011/0066930 A1; publ. Mar. 17, 2011).

§ 101 Rejection—Transitory Signal

We are unpersuaded by Appellants’ arguments (App. Br. 20–29; *see also* Reply Br. 6–7) that independent claim 35 complies with 35 U.S.C. § 101 as statutory subject matter.

The Examiner found that independent claim 35 recites a “computer-readable storage medium” and that “[t]he specification provides an open ended definition of what constitutes a ‘computer-readable storage medium.’” (Final Act. 12; *see also* Ans. 4.) Accordingly, the Examiner found that “applying the broadest reasonable interpretation in light of the specification . . . , the claim as a whole covers both transitory and non-transitory media.” (*Id.*) We agree with the Examiner.

Independent claim 35 recites “[a] computer program product . . . comprising: a *computer-readable storage medium*” (emphasis added). Appellants’ Specification states the following:

The computer-readable medium may be a computer-readable signal medium or a computer-readable storage medium. *A computer-readable storage medium may be*, for example, but not limited to, an electronic, magnetic, *optical, electromagnetic*, infrared, or semiconductor system, apparatus, or device, or any suitable combination of the foregoing.

(¶ 10.) Additionally, Appellants’ Specification states the following:

A computer-readable signal medium may include a propagated data signal with computer-readable program code embodied therein, for example, in baseband or as part of a carrier wave. Such a propagated signal may take any of a variety of

forms, including, but not limited to, *electro-magnetic, optical*, or any suitable combination thereof. A *computer-readable signal medium may be any computer-readable medium that is not a computer-readable storage medium and that can communicate, propagate*, or transport a program for use by or in connection with an instruction execution system, apparatus, or device.

(¶ 11 (emphases added).) Accordingly, because Appellants' Specification states that "[a] computer-readable storage medium may be . . . *optical [or] electromagnetic*" (¶ 10 (emphasis added)) and "a *propagated signal* may take any of a variety of forms, including, but not limited to, *electro-magnetic [or] optical*" (¶ 11 (emphases added)), under the broadest reasonable interpretation consistent with the Specification, the "computer-readable storage medium" of claim 35 encompasses transitory signals.

Appellants' Specification further discloses that "computer-readable signal medium *may be* any computer-readable medium that is not a computer-readable storage medium" and "computer-readable signal medium *may include* a propagated data signal." (¶ 11 (emphases added).) However, such disclosure does not exclude a "computer-readable signal medium" from encompassing "a propagated data signal" because of the language "may" is an expression of possible exclusion, rather than absolute exclusion.

First, Appellants argue that

the present specification clearly distinguishes a signal medium from a storage medium, and thus, one having ordinary skill in the art would not construe the claimed "storage medium" as consisting of a transitory, propagating signal since such a construction is unreasonable as being inconsistent with . . . paragraph [0011] of the present specification.

(App. Br. 23; *see also* Reply Br. 6–7.) Similarly, Appellants argue that "a storage medium is mutually exclusive from a signal medium" and that "the genus of 'storage medium' cannot include the species of 'propagated

data signals.” (App. Br. 29.) However, as discussed previously, because Appellants’ Specification discloses that a “computer-readable signal medium *may* be any computer-readable medium that is not a computer-readable storage medium” and “computer-readable signal medium may include a propagated data signal” (§ 11 (emphasis added)), the Specification does not absolutely exclude a “computer-readable storage medium” from encompassing “a propagated data signal.”

Second, Appellants argue that a “table . . . [of sixteen] patent applications having nearly (if not exactly) identical language within the specification have recently had rejections under 35 U.S.C. § 101 withdrawn based upon arguments very similar to those presented above [with respect to paragraphs 10 and 11 of the Specification].” (App. Br. 24.) However, patentability decisions involving claims in other patents or patent applications are not necessarily germane to issues in another patent application. *See In re Gyurik*, 596 F.2d 1012, 1016 n.15 (CCPA 1979) (“Each case is determined on its own merits” and “[i]n reviewing specific rejections of specific claims, this court does not consider allowed claims in other applications or patents”).

Accordingly, independent claim 35 is directed to non-statutory subject matter. *See In re Nuijten*, 500 F.3d 1346, 1356–57 (Fed. Cir. 2007) (“A transitory, propagating signal like Nuijten’s is not a ‘process, machine, manufacture, or composition of matter.’ . . . [T]hus, such a signal cannot be patentable subject matter”).

Thus, we agree with the Examiner that independent claim 35 is not directed to one of the four patent-eligible subject matter categories.

Accordingly, we sustain the rejection of independent claim 35 under 35 U.S.C. § 101. Claims 36–40 depend from claim 35, and Appellants have not presented any substantive arguments with respect to these claims. Therefore, we sustain the rejection of claims 36–40 under 35 U.S.C. § 101, for the same reasons discussed with respect to independent claim 35.

§ 103 Rejection—Hildebrand and Grigsby

We are further unpersuaded by Appellants’ arguments (App. Br. 29–32; *see also* Reply Br. 7–9) that the combination of Hildebrand and Grigsby would not have rendered obvious independent claim 21, which includes the limitation “analyzing information associated with the first website to determine whether the reference will cause an increase in workload to the second website.”

The Examiner found that the web source of Hildebrand, in which the generated load can be estimated and followed by a warning being sent to a service, corresponds to the limitation “analyzing information associated with the first website to determine whether the reference will cause an increase in workload to the second website.” (Final Act. 13; *see also* Ans. 4–5.) We agree with the Examiner’s findings.

Hildebrand relates to communications, in particular, “allocating resources based on events in a network environment.” (§ 1.) Hildebrand provides an example in which “if there was a story on a popular blog about the animated movie ‘UP’ or that mentioned ‘pixar.com,’ the Disney-Pixar web servers could have capacity added to them proactively.” (§ 23.) In another example, Hildebrand explains that “[s]ome sources can theoretically drive a different amount of traffic, which may be based on the section of a

source (e.g., a section in Twitter) that is generating the traffic” and that “[f]or these sources, a designated application program interface (API), or web service calls can be used to estimate the generated load.” (§ 23.)

Hildebrand further explains that “cooperating sources of traffic . . . warn the service of the impending load (e.g., before the keyword or link of interest is made available to the general public)” and “[t]he cooperating source can notify the service of the impending load, along with an estimate of the load that would most likely be generated.” (§ 26.) Because Hildebrand explains that: (i) some web sources (e.g., popular blog about the animated movie “UP” or Twitter) can drive a different amount of traffic, (ii) an API or web services calls can estimate the generated load (§ 23), and (iii) a cooperating source can notify a service of the impending load (§ 26), Hildebrand teaches the limitation “analyzing information associated with the first website to determine whether the reference will cause an increase in workload to the second website.”

First, Appellants argue that “the Examiner is improperly relying upon the ‘link to the web server’ to teach both the claimed ‘information associated with the first website’ and ‘a reference to a second website’” and “[w]hile Hildebrand teaches predicting a load for a website, nowhere does Hildebrand teach that this estimate of the load involves ‘analyzing information associated with the first website.’” (App. Br. 32; *see also* Reply Br. 9.) Contrary to Appellants’ arguments, the Examiner cited to paragraph 23 of Hildebrand for teaching the limitation “analyzing information associated with the first website” and cited to paragraph 26 of Hildebrand for teaching the limitation “a reference to a second website.” (*See* Ans. 4–5.)

Second, Appellants further argue that “[t]he fact that the selection is made within the first website (e.g., ‘Twitter’) does not establish that information associated with this first website is analyzed, as claimed.” (Reply Br. 8.) Similarly, Appellants argue that “[t]his teaching [‘[a]fter the load is estimated, capacity can be proactively added to the system quickly and automatically, before the full brunt of the load operates to flood the service’ in paragraph 23 of Hildebrand] . . . is silent as to information of the first website being analyzed” but “[i]nstead, the Examiner’s citation refers to what happens occurs after a determination has been made that the workload will be increased.” (*Id.*) However, the Examiner provided a citation to paragraph 23 of Hildebrand (Ans. 5), which also explains that “[f]or these sources [which theoretically drive a different amount of traffic], a designated application program interface (API), or web service calls can be used to estimate the generated load” (¶ 23).

Thus, we agree with the Examiner that the combination of Hildebrand and Grigsby would have rendered obvious independent claim 21, which includes the limitation “analyzing information associated with the first website to determine whether the reference will cause an increase in workload to the second website.”

Accordingly, we sustain the rejection of independent claim 21 under 35 U.S.C. § 103(a). Claims 22–27 depend from claim 21, and Appellants have not presented any additional substantive arguments with respect to these claims. Therefore, we sustain the rejection of claims 22–27 under 35 U.S.C. § 103(a), for the same reasons discussed with respect to independent claim 21.

Independent claims 28 and 35 recite limitations similar to those discussed with respect to independent claim 21, and Appellants have not presented any additional substantive arguments with respect to these claims. We sustain the rejection of claims 28 and 35, as well as dependent claims 29–34 and 36–40, for the same reasons discussed with respect to claim 21.

§ 103 Rejection—Hildebrand, Grigsby, and Sabnani

Although Appellants nominally argue the rejection of dependent claims 23, 30, and 37 separately (App. Br. 33), the arguments presented do not point out with particularity or explain why the limitations of these dependent claims are separately patentable. Instead, Appellants merely argue that “[t]he additional reference to Sabnani does not cure the argued deficiencies of Hildebrand and Grigsby” and “even if one having ordinary skill in the art did modify Hildebrand in view of Grigsby and Sabnani, the proposed combination of references would not yield the claimed invention.” (*Id.*) We are not persuaded by these arguments for the reasons discussed with respect to claims 21, 28, and 35, from which claims 23, 30, and 37 depend. Accordingly, we sustain this rejection.

§ 103 Rejection—Hildebrand, Grigsby, and Rowe

Although Appellants nominally argue the rejection of dependent claims 24, 31, and 38 separately (App. Br. 33–34), the arguments presented do not point out with particularity or explain why the limitations of these dependent claims are separately patentable. Instead, Appellants merely argue that “[t]he additional reference to Rowe does not cure the argued

deficiencies of Hildebrand and Grigsby” and “even if one having ordinary skill in the art did modify Hildebrand in view of Grigsby and Rowe, the proposed combination of references would not yield the claimed invention.” (*Id.* at 34.) We are not persuaded by these arguments for the reasons discussed with respect to claims 21, 28, and 35, from which claims 24, 31, and 38 depend. Accordingly, we sustain this rejection.

NEW GROUND OF REJECTION UNDER 37 C.F.R. § 41.50(b)

§ 101 Rejection—Abstract Idea

In the Final Office Action, the Examiner stated that “claims 21, 28[,] and 35 are directed to abstract ideas of 1) ‘*comparing new and stored information and using rules to identify options*’ and 2) ‘*using categories to organize, store and transmit information.*’” (Final Act. 10 (emphases added).) However, in the Examiner’s Answer, the Examiner stated that “[t]he independent claims are directed to the following abstract ideas: 1) ‘*obtaining and comparing intangible data*’” (Ans. 2) and “2) ‘*organizing information through mathematical correlations*’” (*id.* at 3 (emphases added)). Because the Examiner has advanced a new position or rationale with respect to subject matter eligibility under 35 U.S.C. § 101, a new ground of rejection is appropriate to provide Appellants with a fair opportunity to respond. *See In re De Blauwe*, 736 F.2d 699, 706 n.9 (Fed. Cir. 1984) (“Where the board makes a decision advancing a position or rationale new to the proceedings, an applicant must be afforded an opportunity to respond to that position or rationale by submission of contradicting evidence”).

We enter the following new ground of rejection:

Claims 21–40 are rejected under 35 U.S.C. § 101 as being directed to non-statutory subject matter of an abstract idea.

A patent may be obtained for “any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof.” 35 U.S.C. § 101. The Supreme Court has held that this provision contains an important implicit exception: laws of nature, natural phenomena, and abstract ideas are not patentable. *Alice Corp. Pty. Ltd. v. CLS Bank Int’l*, 134 S. Ct. 2347, 2354 (2014); *Gottschalk v. Benson*, 409 U.S. 63, 67 (1972) (“Phenomena of nature, though just discovered, mental processes, and abstract intellectual concepts are not patentable, as they are the basic tools of scientific and technological work”). Notwithstanding that a law of nature or an abstract idea, by itself, is not patentable, the application of these concepts may be deserving of patent protection. *Mayo Collaborative Servs. v. Prometheus Labs., Inc.*, 566 U.S. 66, 71–72 (2012). In *Mayo*, the Court stated that “to transform an unpatentable law of nature into a patent-eligible *application* of such a law, one must do more than simply state the law of nature while adding the words ‘apply it.’” *Mayo*, 566 U.S. at 72 (internal citation omitted).

In *Alice*, the Supreme Court reaffirmed the framework set forth previously in *Mayo* “for distinguishing patents that claim laws of nature, natural phenomena, and abstract ideas from those that claim patent-eligible applications of these concepts.” *Alice*, 134 S. Ct. at 2355. The first step in the analysis is to “determine whether the claims at issue are directed to one of those patent-ineligible concepts.” *Id.* If the claims are directed to a patent-ineligible concept, then the second step in the analysis is to consider the elements of the claims “individually and ‘as an ordered combination’” to

determine whether there are additional elements that “‘transform the nature of the claim’ into a patent-eligible application.” *Id.* (quoting *Mayo*, 566 U.S. at 79, 78). In other words, the second step is to “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.’” *Id.* (brackets in original) (quoting *Mayo*, 566 U.S. at 72–73). “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.* at 2357 (brackets in original) (quoting *Mayo*, 566 U.S. at 77–78). The prohibition against patenting an abstract idea “cannot be circumvented by attempting to limit the use of the formula to a particular technological environment or adding insignificant post-solution activity.” *Bilski v. Kappos*, 561 U.S. 593, 610–11 (2010) (internal citation and quotation marks omitted). The Court in *Alice* noted that “[s]imply appending conventional steps, specified at a high level of generality,’ was not ‘*enough*’ [in *Mayo*] to supply an ‘inventive concept.’” *Alice*, 134 S. Ct. at 2357 (quoting *Mayo*, 566 U.S. at 82–83, 77–78, 72–73).

Step one: Are the claims at issue directed to a patent-ineligible concept?

Claim 21 is a method claim comprising three steps, each of which can be performed in the human mind or by a human using pen and paper. The first step, “identifying a reference to a second website provided to a first website for posting by the first website,” can be performed by a human reading records from a preexisting database of Internet links connecting a first website to a second website. Next, the second step, “analyzing

information associated with the first website to determine whether the reference will cause an increase in workload to the second website,” can be performed by a human with the knowledge that clicking on the hyperlink for the second website, which is posted on the first website, will drive Internet traffic to the second website. Last, the third step “communicating, responsive to determining the reference will cause the increase in workload, an alert to one of the second website, or an entity that manages the second website,” can be performed by written communication to either the second website or an entity that manages the second website.

Because all three method steps of claim 15 can either be performed by human thought alone, or by a human using pen and paper, claim 15 is directed to a patent-ineligible abstract idea. *See CyberSource Corp. v. Retail Decisions, Inc.*, 654 F.3d 1366, 1372–73 (Fed. Cir. 2011) (“[U]npatentable mental processes” include “steps [that] can be performed in the human mind, or by a human using a pen and paper”). Claims 28 and 35 recite limitations similar to those discussed with respect claim 15. Thus, claims 28 and 35 are also directed to a patent-ineligible abstract idea.

Step two: Is there something else in the claims that ensures that they are directed to significantly more than a patent-ineligible concept?

Because claims 21, 28, and 35 are directed to an abstract idea, the question to be settled next, according to *Alice*, is whether claims 21, 28, and 35 recite an element, or combination of elements, that is enough to ensure that the claim is directed to significantly more than an abstract idea.

Claim 21 is a method claim, which includes the limitations “a first website” and “a second website.” Claims 28 is “[a] computer hardware

system” claim, which includes the limitation “a hardware processor.” Similarly, claim 35 is “[a] computer program product,” which includes the limitation “a computer-readable storage medium.”

To the extent “website[s]” are considered hardware components, such claimed hardware components, including “website[s],” “a hardware processor,” and “a computer-readable storage medium” are generic, purely conventional computer elements. Thus, the claims do no more than require generic computer elements to perform generic computer functions, rather than improve computer capabilities.

Accordingly, appending conventional “website[s],” “a hardware processor,” or “a computer-readable storage medium” to an abstract idea is not enough to transform an abstract idea into a patent-eligible invention. *See Alice*, 134 S. Ct. at 2358 (“[T]he mere recitation of a generic computer cannot transform a patent-ineligible abstract idea into a patent-eligible invention”).

First, Appellants argue that “the claimed invention is tied to a machine” and thus, “the Examiner has not reasonably tied the facts of the present claims to the facts of Cybersource.” (Reply Br. 4.) However, *Cybersource* was only relied upon for step one of the *Alice* inquiry, a determination of whether the claims are directed to a patent-ineligible concept. Even if Appellants are correct that claims 21, 28, and 35 are “tied to a machine,” under step two of the *Alice* inquiry, such hardware components are generic, purely conventional computer elements.

Second, Appellants argue that “the claimed invention is directed to an improvement of the functionality of a computer system itself.” (Reply Br. 5.) However, other than providing a conclusory statement that

claims 21, 28, and 35 are “directed to an improvement of the functionality of a computer system itself,” Appellants have not provided any additional explanation or evidence to support this position. For example, Appellants have not provided citations to the Specification to demonstrate that the claimed invention is an improvement of an existing technology or demonstrated a deficiency in the prior art. *See Enfish, LLC v. Microsoft Corp.*, 822 F.3d 1327, 1337 (Fed. Cir. 2016) (“Moreover, our conclusion that the claims are directed to an improvement of an existing technology is bolstered by the specification’s teachings that the claimed invention achieves other benefits over conventional databases, such as increased flexibility, faster search times, and smaller memory requirements”).

Pursuant to our authority under 37 C.F.R. § 41.50(b), we reject claims 21–40 under 35 U.S.C. § 101 as directed to non-statutory subject matter of an abstract idea.

This decision contains a new ground of rejection pursuant to 37 C.F.R. § 41.50(b).

37 C.F.R. § 41.50(b) provides that a “new ground of rejection pursuant to this paragraph shall not be considered final for judicial review.”

37 C.F.R. § 41.50(b) also provides that Appellants, WITHIN TWO MONTHS FROM THE DATE OF THE DECISION, must exercise one of the following two options with respect to the new ground of rejection to avoid termination of proceedings (37 C.F.R. § 1.197(b)) as to the rejected claims:

- (1) *Reopen prosecution.* Submit an appropriate amendment of the claims so rejected or new Evidence relating to the claims so rejected, or both, and have the matter reconsidered

by the examiner, in which event the prosecution will be remanded to the examiner. . . .

(2) *Request rehearing.* Request that the proceeding be reheard under §41.52 by the Board upon the same Record. . . .

No time period for taking any subsequent action in connection with this appeal may be extended under 37 C.F.R. § 1.136(a).

DECISION

The Examiner's decision rejecting claims 35–40 under 35 U.S.C. § 101 as being directed to non-statutory subject matter of a transitory signal is affirmed.

The Examiner's decision rejecting claims 21–36 under the judicially created doctrine of obviousness-type double patenting is affirmed.

The Examiner's decision rejecting claims 21–40 under 35 U.S.C. § 103(a) is affirmed.

A new ground of rejection has been entered under 37 C.F.R. § 41.50(b) for claims 21–40, rejected under 35 U.S.C. § 101 as being directed to non-statutory subject matter of an abstract idea.

AFFIRMED
37 C.F.R. § 41.50(b)