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UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

Ex parte GEOFFRY A. WESTPHAL¹

Appeal 2017-009241
Application 13/731,291
Technology Center 3600

Before: JAMES R. HUGHES, JASON J. CHUNG, and
SCOTT B. HOWARD, *Administrative Patent Judges*.

HUGHES, *Administrative Patent Judge*.

DECISION ON APPEAL

STATEMENT OF THE CASE

Appellant seeks our review under 35 U.S.C. § 134(a) of the Examiner's decision rejecting claims 1–5 and 9–11. Claims 6–8 and 12–21 have been cancelled. *See* Final Act. 1–2; Appeal Br. 1.² We have jurisdiction under 35 U.S.C. § 6(b). We Affirm.

¹ According to Appellant, the real party in interest is W.W. Grainger, Inc. Appeal Br. 2.

² We refer to Appellant's Specification filed Dec. 31, 2012 ("Spec."); Appeal Brief filed Mar. 1, 2017 ("Appeal Br."); and Reply Brief filed June 14, 2017 ("Reply Br."). We also refer to the Examiner's Final Office Action mailed July 14, 2016 ("Final Act."), and Answer mailed Apr. 18, 2017 ("Ans.").

Appellant's Invention

The invention “relates generally to e-commerce and, more particularly, to systems and methods for providing navigation tendencies to users of a website” (Spec. ¶ 1). More specifically Appellant’s invention relates to computer readable media for monitoring interactions a user with an electronic commerce website. *See* Spec. ¶ 3–4. The process for monitoring user interactions includes the steps of monitoring interactions a user with an electronic commerce website, determining if the user navigates (performs an interaction indicative of a navigation) to a web page associated with web content of the electronic commerce website, and starting a timing element (causing a timing element to start a measure of a predetermined period of time) responsive to the navigation. Once the timer has started, the process continues to monitor interactions of the user with the website and determines if the user navigates away (performs an interaction indicative of a navigation away) from the web page (associated with web content of the website). If the user does not navigate away from the webpage before a time limit (before the expiration of a predetermined period of time measured by the timing element), storing the monitored interactions (causing the monitored interactions of the user to be stored in a data repository). The process then displays (on the electronic commerce website) a measure of user traffic for the particular web content based on the stored monitored interactions. *See* Spec. ¶¶ 30, 32, 33, 37, 38, 40–49; Abstract.

Representative Claim

Independent claim 1, reproduced below, further illustrates the invention:

1. A non-transitory computer readable media having stored thereon instructions which, when executed by a computer, perform steps comprising:

monitoring interactions of at least one user with an electronic commerce website to determine if the at least one user has performed an interaction indicative of a navigation to a web page that is associated with at least one of a plurality of categories of web content of the electronic commerce website;

in response to it being determined that the at least one user has performed an interaction indicative of a navigation to a web page that is associated with at least one of a plurality of categories of web content of the electronic commerce website, causing a timing element to start a measure of a predetermined period of time;

continuing to monitor for interactions of the at least one user with the electronic commerce website to determine if the at least one user has performed an interaction indicative of a navigation away from the web page that is associated with the at least one of a plurality of categories of web content of the electronic commerce website;

causing the monitored interactions of the at least one user to be stored in a data repository only when it is determined from the continued monitoring that the at least one user has failed to perform an interaction indicative of a navigation away from the web page that is associated with the at least one of a plurality of categories of web content of the electronic commerce website before an expiration of the predetermined period of time being measured by the timing element; and

displaying on the electronic commerce website a measure of user traffic for at least one of the plurality of categories of web content, the measure of user traffic based at least in part on the monitored interactions of the at least one user with the at least

one of the plurality of categories of web content that are caused to be stored in the data repository.

Appeal Br. 9–10 (Claims Appendix).

Rejections on Appeal

1. The Examiner rejects claims 1–5 and 9–11 under 35 U.S.C. § 101 as being directed to patent-ineligible subject matter. *See* Final Act. 5–6.

2. The Examiner rejects claims 1–5 and 9–11 under pre-AIA 35 U.S.C. § 103(a) as being unpatentable over Broman (US 2011/0252329 A1, published Oct. 13, 2011), Pfeifer et al. (US 2004/0095383 A1, published May 20, 2004) (“Pfeifer”), and Ditkovski et al. (US 2010/0010890 A1, published Jan. 14, 2010) (“Ditkovski”). *See* Final Act. 8–16.

ISSUES

Based upon our review of the record, Appellant’s contentions, and the Examiner’s findings and conclusions, the issue before us follows:

1. Did the Examiner err in finding Appellant’s claims were directed to patent-ineligible subject matter under 35 U.S.C. § 101?

2. Did the Examiner err in finding the combination of Broman, Pfeifer, and Ditkovski would have taught or suggested:

causing the monitored interactions of the at least one user to be stored in a data repository only when it is determined from the continued monitoring that the at least one user has failed to perform an interaction indicative of a navigation away from the web page that is associated with the at least one of a plurality of categories of web content of the electronic commerce website before an expiration of the predetermined period of time being measured by the timing element

as recited in Appellants’ claim 1?

ANALYSIS

Patent-Ineligible Subject Matter Under 35 U.S.C. § 101

Appellant argues independent claim 1 and dependent claims 2–5 and 9–11) together as a group with respect to the § 101 rejection. *See* Appeal Br. 5–6. We select independent claim 1 as representative of Appellant’s arguments with respect to claims 1–5 and 9–11. 37 C.F.R. § 41.37(c)(1)(iv).

The Examiner rejects the claims (claim 1) as being directed to patent-ineligible subject matter in that claim 1 is “directed to the abstract idea of an idea of itself, namely monitoring interactions on electronic commerce websites to measure user traffic,” which is “essentially collecting and comparing known information.” Final Act. 5. Additionally, the Examiner concluded the

claims do not include limitations that are “significantly more” than the abstract idea because the claims do not include an improvement to another technology or technical field, an improvement to the functioning of the computer itself, effecting a transformation or reduction of a particular article to a different state or thing, or meaningful limitations beyond generally linking the use of an abstract idea to a particular technological environment.

Final Act. 6.

Appellant summarizes the relevant applicable case law (*see* Appeal Br. 3–5) and contends the claims are not directed to the abstract idea proposed by the Examiner because “the claims set forth use of a programmatic structure that improves the functioning of technology” (Appeal Br. 5; *see* Reply Br. 2), “i.e., website monitoring and tracking technology, and which is more than the generalized use of a computer as a tool to conduct a known or obvious process . . . [and] impart a specific

functionality to a monitoring and tracking system” (Appeal Br. 5–6; *see* Reply Br. 2) similar to “the claims in *Trading Techs, Intl., Inc. v. CQG, Inc.*” (Appeal Br. 6 (citing *Trading Techs, Intl., Inc. v. CQG, Inc.*, 675 Fed. App’x 1001 (Fed. Cir. 2017))).

Under 35 U.S.C. § 101, a patent may be obtained for “any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof.” The Supreme Court has “long 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*, 573 U.S. 208, 216 (2014) (quoting *Ass’n for Molecular Pathology v. Myriad Genetics, Inc.*, 569 U.S. 576, 589 (2013)).

The Supreme Court, in *Alice*, reiterated the two-step framework previously set forth in *Mayo Collaborative Services v. Prometheus Laboratories, Inc.*, 566 U.S. 66, 77–80 (2012), “for distinguishing patents that claim laws of nature, natural phenomena, and abstract ideas from those that claim patent-eligible applications of those concepts.” *Alice*, 573 U.S. at 217. Assuming that a claim nominally falls within one of the statutory categories of machine, manufacture, process, or composition of matter, the first step in the analysis is to “determine whether the claims at issue are directed to one of those patent-ineligible concepts,” e.g., to an abstract idea. *Id.* For example, abstract ideas include, but are not limited to, fundamental economic practices, methods of organizing human activities, an idea of itself, and mathematical formulas or relationships. *Id.* at 217–221. If the claims are not directed to an abstract idea, the inquiry ends. Otherwise, the inquiry proceeds to the second step where the elements of the claims are considered “individually and ‘as an ordered combination’ to determine

whether the additional elements ‘transform the nature of the claim’ into a patent-eligible application.” *Alice*, 573 U.S. at 217 (quoting *Mayo*, 566 U.S. at 78–79). This second step is described as “a search for an ‘inventive concept’—*i.e.*, an element or combination of elements that is ‘. . . significantly more than . . . the [ineligible concept] itself.’” *Id.* at 217–218 (alteration in original) (quoting *Mayo*, 566 U.S. at 72–73).

Alice Step 1 Analysis

The Court acknowledged in *Mayo*, that “all inventions at some level embody, use, reflect, rest upon, or apply laws of nature, natural phenomena, or abstract ideas.” *Mayo*, 566 U.S. at 71. “We therefore look to whether the claims . . . focus on a specific means or method that improves the relevant technology or are instead directed to a result or effect that itself is the abstract idea and merely invoke generic processes and machinery.” *McRO, Inc. v. Bandai Namco Games Am. Inc.*, 837 F.3d 1299, 1314 (Fed. Cir. 2016); see *Enfish, LLC v. Microsoft Corp.*, 822 F.3d 1327, 1336 (Fed. Cir. 2016).

Turning to the first step of the eligibility analysis, “the first step in the *Alice* inquiry . . . asks whether the focus of the claims is on the specific asserted improvement in computer capabilities . . . or, instead, on a process that qualifies as an ‘abstract idea’ for which computers are invoked merely as a tool.” *Enfish*, 822 F.3d at 1335–36. “The abstract idea exception prevents patenting a result where ‘it matters not by what process or machinery the result is accomplished.’” *McRO*, 837 F.3d at 1312 (quoting *O’Reilly v. Morse*, 56 U.S. 62, 113 (1853)).

We begin our analysis with an interpretation of claim 1. Claim 1 recites a computer readable media with instructions (stored thereon) that,

when executed by a computer, perform a process of monitoring interactions of a user with an electronic commerce (e-commerce) website. The process monitors interactions of a user with an e-commerce website, and determines if the user performs an interaction indicative of a navigation—i.e., navigates—to a web page that is associated with at least one of a plurality of categories of web content of the e-commerce website. The process causes a timing element to start a measure of a predetermined period of time responsive to the navigation—i.e., starts a countdown timer. Once the timer has started, the process continues to monitor interactions of the user with the website and determines if the user performs an interaction indicative of a navigation away—i.e., navigates away—from the web page associated with web content of the e-commerce website. If the user does not navigate away from the webpage before the expiration of a predetermined period of time measured by the timing element—i.e., before a time limit—the process causes the monitored interactions of the user to be stored in a data repository—i.e., stores the monitored interactions. The process then displays (on the e-commerce website) a measure of user traffic for at least one of the plurality of categories of web content, based on the stored monitored interactions.

The relevant claim limitations — monitoring user interactions with an e-commerce website, determining if the user navigates to a web page associated with web content of the e-commerce website, starting a countdown timer, determining if the user navigates away from the web page associated with web content of the e-commerce website, storing the monitored user interactions if the predetermined time limit (timer) expires, and displaying a measure of user traffic (user traffic statistics) based on the

stored monitored user interactions — are all functional in nature. That is, the limitations recite the process result (the what), but not the means by which the results are accomplished (the how). Our interpretation concurs with the Examiner’s, i.e., that the claim is directed to “monitoring interactions on electronic commerce websites to measure user traffic[, which is] essentially collecting and comparing known information.” Final Act. 5.

Appellant contends claim 1 is not directed to an abstract idea in that the claim improves “the functioning of technology” (Appeal Br 5 (emphasis omitted)), “is more than the generalized use of a computer as a tool” (Appeal Br 5 (emphasis omitted)), and “impart[s] a specific functionality to a monitoring and tracking system” (Appeal Br. 6), i.e., improves technology and recites a particular solution to a problem similar to the claims in *Trading Techs.* See Appeal Br. Br. 5–6; see also Reply Br. 2.

Appellant misconstrues the relevant law and precedent. In *Trading Techs.*, the district court found the at-issue claims “do not simply . . . display[] information on a graphical user interface,” but instead “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,” and, accordingly, held the claims to be patent-eligible. *Trading Techs.*, 675 Fed. App’x at 1004. The Federal Circuit affirmed the district court’s decision concluding “the claimed subject matter is ‘directed to a specific improvement to the way computers operate,’” in that “the claimed graphical user interface method imparts a specific functionality to a trading system ‘directed to a specific implementation of a solution to a problem in the

software arts.’” *Id.* at 1006 (internal citations omitted) (quoting *Enfish*, 822 F.3d at 1336, 1339).

Appellant’s claim 1, unlike the claims in *Trading Techs* and *Enfish*, is not directed to a specific implementation of a solution to a problem in the software arts, or a specific improvement to the way computers operate. Rather it is directed to a general process of monitoring (and recording) interactions on an electronic commerce website to measure and display user traffic. That is, there is no aspect of claim 1 that defines a technological improvement, whether in a software algorithm or a hardware design. *See McRO*, 837 F.3d at 1314; *Enfish*, 822 F.3d at 1335–36.

Further, with respect to step 1 of the *Alice/Mayo* analysis, instead of using a fixed definition of an abstract idea and analyzing how claims fit (or do not fit) within the definition, “the decisional mechanism courts now apply is to examine earlier cases in which a similar or parallel descriptive nature can be seen—what prior cases were about, and which way they were decided.” *Amdocs (Isr.) Ltd. v. Openet Telecom, Inc.*, 841 F.3d 1288, 1294 (Fed. Cir. 2016) (citing *Elec. Power Grp., LLC v. Alstom S.A.*, 830 F.3d 1350, 1353–54 (Fed. Cir. 2016)). As part of this inquiry, we must “look at the ‘focus of the claimed advance over the prior art’ to determine if the claim’s ‘character as a whole’ is directed to excluded subject matter.” *Affinity Labs of Tex., LLC v. DirecTV, LLC*, 838 F.3d 1253, 1257 (Fed. Cir. 2016).

Here, Appellant’s claims generally, and independent claim 1 in particular, relate to collecting and analyzing information to determine whether to store user interactions and displaying user traffic statistics based on the stored information (monitored user interactions). *See supra*. That is,

Appellant’s claims relate to collecting and analyzing data utilizing un-recited processes or algorithms and devices to make the determination (whether to store the monitored user interactions) and display the resulting statistics. *See* Abstract; Spec. ¶¶ 1, 3. This is consistent with how Appellant describes the claimed invention. *See* Appeal Br. 2–3 (citing Spec. ¶¶ 30, 32, 33, 37, 38, 40–49). Indeed, the storing feature of claim 1 (“causing the monitored interactions . . . to be stored . . . only when” the user does not navigate away from the web page before the timer expires)—the key feature that, purportedly “impart[s] a specific functionality to a monitoring and tracking system” (Appeal Br. 6)—is not even described explicitly in the Specification. Rather, the Specification generally describes that “the system . . . may be configured to count a visit only after a user has spent a minimum amount of time within the selected category of web content.” Spec. ¶ 33.

The present claims are analogous to a number of cases in which courts have identified similar claims as encompassing abstract ideas. Our reviewing court has held that abstract ideas include gathering, organizing, and analyzing. *Elec. Power Grp.*, 830 F.3d at 1353–54 (finding claims directed to a “combination of . . . abstract-idea processes . . . of gathering and analyzing information” to be abstract). Similarly, our reviewing court has held that abstract ideas include gathering, organizing, analyzing, and storing information. *See Two-Way Media Ltd. v. Comcast Cable Commc’ns, LLC.*, 874 F.3d 1329, 1337–38 (Fed. Cir. 2017) (finding claims directed to the functional results of accumulating, converting, and monitoring records manipulate data “but fail[] to do so in a non-abstract way”); *Content Extraction & Transmission LLC v. Wells Fargo Bank, Nat’l Ass’n*, 776 F.3d 1343, 1345, 1347 (Fed. Cir. 2014) (finding the “claims generally recite . . .

extracting data [and] recognizing specific information from the extracted data” and that the “claims are drawn to the basic concept of data recognition”). The Federal Circuit also recently addressed whether claims utilizing a timing mechanism in conjunction with monitoring user interactions with content of a website (advertising of goods and services) in a “pay-per-click system” were directed to an abstract idea. *See Zuili v. Google LLC*, 722 Fed. App’x. 1027 (Fed. Cir. 2018). The CAFC held that “the Asserted Claims are directed to the abstract idea of collecting, transmitting, analyzing, and storing data to detect fraudulent and/or invalid clicks based on the time between two requests by the same device or client.” *Zuili*, 722 Fed. App’x. 1030.

Here, the collection and analysis of information (user interactions) to determine whether to store the information, and the display of statistics based on the stored information, are analogous to the abstract ideas of collecting and analyzing information discussed in *Electric Power Group*, *Two-Way Media*, *Content Extraction*, and *Zuili*.

Appellant’s claims can also be distinguished from patent-eligible claims such as those in *McRO*, *Bascom* (*Bascom Global Internet Servs., Inc. v. AT&T Mobility LLC*, 827 F.3d 1341 (Fed. Cir. 2016)), *Enfish*, and *Trading Techs*, that are directed to “a specific means or method that improves the relevant technology” (*McRO*, 837 F.3d at 1314) or a “specific technical solution” (*Bascom*, 827 F.3d at 1351–52) or “a specific improvement to the way computers operate” (*Enfish*, 822 F.3d at 1336). Appellant’s claims are directed to the results of data analysis rather than a particular way of performing or inventive technology for monitoring and storing user interactions with a website or, in other words, “achiev[ing] these

results in a non-abstract way.” *Two-Way Media*, 874 F.3d at 1337–38 (quotations omitted). In summary, “the focus of the claims is not on such an improvement in computers as tools, but on certain independently abstract ideas that use computers as tools.” *Elec. Power Grp.*, 830 F.3d at 1354. Thus, we agree with the Examiner that the claims are directed to the abstract ideas of monitoring and analyzing user interactions with a website, utilizing a timer to determine whether to store the monitored user interactions, and displaying user traffic statistics based on the stored monitored user interactions, which is, alternately and collectively, a method of organizing human activity (an idea of itself), as well as collecting and analyzing information.

Alice Step 2 Analysis

Having found Appellants’ claims are directed to an abstract idea under *Alice*’s step 1 analysis, we next address whether the claims add significantly more to the alleged abstract idea. As directed by our reviewing court, we search for an “‘inventive concept’ sufficient to ‘transform the nature of the claim into a patent-eligible application.’” *McRO*, 837 F.3d at 1312 (quoting *Alice*, 134 S.Ct. at 2355). The implementation of the abstract idea involved must be “more than performance of ‘well-understood, routine, [and] conventional activities previously known to the industry.’” *Content Extraction*, 776 F.3d at 1348–49 (alteration in original) (quoting *Alice*, 134 S.Ct. at 2359). The “inventive concept” “must be significantly more than the abstract idea itself, and cannot simply be an instruction to implement or apply the abstract idea on a computer.” *Bascom*, 827 F.3d at 1349 (citation omitted).

Here, the Examiner determined that Appellant’s claims do not add significantly more. *See* Final Act. 5–6; Ans. 3. Appellant, on the other hand, did not address whether additional limitations in the claims add significantly more to the alleged abstract idea. *See* Appeal Br. 5–6; Reply Br. 2.

Appellant fails to persuade us of error in the Examiner’s rejection with respect to the second *Alice* step. We agree with the Examiner that Appellant’s claim 1 (and the other pending claims) does not evince an “inventive concept” that is significantly more than the abstract idea itself. We agree with the Examiner that the additional limitations, separately, or as an ordered combination, do not provide meaningful limitations (i.e., do not add significantly more) to transform the abstract idea into a patent eligible application. *See* Final Act. 5–6; Ans. 3. The claim merely recites functions (processes) for collecting and analyzing information utilizing known conventional computers and processes. *See* Spec. ¶ 50 (“a detailed discussion of the actual implementation of each aspect of the disclosure is not necessary . . . the actual implementation of the systems and methods would be well within the routine skill of an engineer”); *see* also Spec. ¶¶ 15, 49. Such conventional computer processes “do not alone transform an otherwise abstract idea into patent-eligible subject matter.” *FairWarning IP, LLC v. Iatric Sys., Inc.*, 839 F.3d 1089, 1096 (Fed. Cir. 2016) (citing *DDR Holdings, LLC v. Hotels.com, L.P.*, 773 F.3d 1245, 1256 (Fed. Cir. 2014)).

For at least the reasons above, we are not persuaded of Examiner error in the rejection of claim 1 under 35 U.S.C. § 101. Thus, we sustain the Examiner’s rejection under § 101 of independent claim 1, as well as dependent claims 2–5 and 9–11, which were not argued separately.

The Obviousness Rejection under 35 U.S.C. § 103

The Examiner rejects independent claim 1 (as well as dependent claims 2–5 and 9–11) as being obvious in view of Broman, Pfeifer, and Ditkovski. *See* Final Act. 8–11; Ans. 4–5. Appellant contends that the combination of Broman, Pfeifer, and Ditkovski does not teach the disputed limitations of claim 1. *See* Appeal Br. 6–7; Reply Br. 3. Specifically, Appellant contends that Ditkovski does not describe navigating away from a website prior to expiration of a timer, which is a separate and distinct action (interaction) from navigating to a website. According to Appellant, Ditkovski instead describes a single action (interaction) of crossing over an advertisement with a pointing device and using a counter/timer (dwell time) to log the interaction. *See* Appeal Br. 6–7; Reply Br. 3.

We agree with Appellant that the Examiner-cited portions of Ditkovski and Broman (*see* Final Act. 8–11; Ans. 4–5 (citing Ditkovski ¶ 25; Broman ¶¶ 86, 87, 89, 90) do not describe navigating away from a website within a time limit. *See* Appeal Br. 6–7; Reply Br. 3; Ditkovski ¶¶ 6, 8, 9, 16–25. In particular, we agree with Appellant that Ditkovski describes a single interaction of crossing over (hovering over) an advertisement and using a counter (dwell time) to determine whether to report (log) the interaction. *See* Ditkovski ¶ 25. If the dwell time (counter value) is insufficient, the interaction will not be reported. *See id.* Ditkovski does not describe using a timer to determine if a user performs two distinct interactions within a time limit as required by claim 1. *See* Appeal Br. 6–7; Reply Br. 3. It is also unclear if Broman teaches “navigating away,” in that Broman merely describes a user navigating to multiple websites (URLs). *See* Broman ¶¶ 86, 87, 89, 90. The Examiner does not explain sufficiently

how the cited portions of Ditkovski and Broman may be combined to teach or suggest the disputed features.

Consequently, we are constrained by the record before us to find that the Examiner erred in determining that the combination of Broman, Pfeifer, and Ditkovski renders obvious Appellant's claim 1. Claims 2–5 and 9–11 depend on, and stand with, claim 1.

CONCLUSIONS

Appellant has not shown that the Examiner erred in rejecting claims 1–5 and 9–11 under 35 U.S.C. § 101.

Appellant has shown that the Examiner erred in rejecting claims 1–5 and 9–11 under 35 U.S.C. § 103(a).

DECISION

Because we affirm at least one ground of rejection with respect to each claim on appeal, we affirm the Examiner's rejection of claims 1–5 and 9–11.

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