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Table with 5 columns: APPLICATION NO., FILING DATE, FIRST NAMED INVENTOR, ATTORNEY DOCKET NO., CONFIRMATION NO.
14/287,298 05/27/2014 Mohit Sewak IN920140037US1 2162

11601 7590 11/01/2018
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Table with 1 column: EXAMINER

WAESCO, JOSEPH M

Table with 2 columns: ART UNIT, PAPER NUMBER

3683

Table with 2 columns: NOTIFICATION DATE, DELIVERY MODE

11/01/2018

ELECTRONIC

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UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

Ex parte MOHIT SEWAK

Appeal 2018-005052
Application 14/287,298¹
Technology Center 3600

Before MAHSHID D. SAADAT, ALLEN R. MacDONALD, and
JOHN P. PINKERTON, *Administrative Patent Judges*.

SAADAT, *Administrative Patent Judge*.

DECISION ON APPEAL

Appellant² appeals under 35 U.S.C. § 134(a) from the Examiner's Final Rejection of claims 8, 11–15, and 18–20. Claims 1–7, 9, 10, 16, and 17 were cancelled. We have jurisdiction under 35 U.S.C. § 6(b).

We affirm.

¹ This Appeal is related to Appeal 2018-005001 (Application 14/639,182) and is directed to the same underlying invention and issues.

² According to Appellant, the real party in interest is International Business Machines Corporation. App. Br. 3.

STATEMENT OF THE CASE

Appellant's invention relates to generating predictive metadata for business forecasting. Spec. ¶ 1. Exemplary claim 1 under appeal reads as follows:

8. A computer program product for business forecasting, the computer program product comprising:

one or more computer-readable storage media and program instructions stored on the one or more computer-readable storage media, the program instructions comprising:

program instructions to receive one or more sets of business metrics, wherein at least one of the one or more sets of business metrics comprises a set of recorded events;

program instructions to receive a first metadata descriptor for a first set of business metrics of the one or more sets of business metrics, wherein the first metadata descriptor indicates that the first set of business metrics has a non-predetermined trend;

program instructions to receive a second metadata descriptor for a second set of business metrics of the one or more sets of business metrics, wherein (i) the second metadata descriptor indicates that the second set of business metrics has a predetermined trend; and (ii) the second metadata descriptor indicates an expressional relationship including more than one set of the one or more sets of business metrics;

in response to the first metadata descriptor indicating that the first set of business metrics describes the non-predetermined trend, program instructions to prepare a third set of business metrics for prediction the third set of business metrics is a forecast of the first set of business metrics;

program instructions to predict one or more values of the third set of business metrics based, at least in part, on (a) one or more values of the first set of business metrics; and (b) one or more statistical models;

in response to the second metadata descriptor indicating that the second set of business metrics describes the predetermined trend, program instructions to determine one or more values for a fourth set of business metrics based, at least in part, on the expressional relationship indicated by the second metadata descriptor, wherein (i) the fourth set of business metrics is a forecast of the second set of business metrics; and (ii) the one or more values are determined without the one or more statistical models; and

program instructions to generate a report including the predicted one or more values of the third set of business metrics and the determined one or more values for a fourth set of business metrics.

REFERENCES and REJECTIONS

Claims 8, 11–15, and 18–20 are provisionally rejected on the ground of non-statutory double patenting as being unpatentable over claims 1 and 4–7 of co-pending Application No. 14/639,182. *See* Final Act. 5–7.³

Claims 8, 11–15, and 18–20 stand rejected under 35 U.S.C. § 101 as being directed to a judicial exception without significantly more. *See* Final Act. 7–12.

Claims 8 and 11–14 stand rejected under 35 U.S.C. § 101 as not being in one of the four statutory categories of invention. *See* Final Act. 12–13.

Claims 8, 11–15, and 18–20 stand rejected under 35 U.S.C. § 103 as being unpatentable over Schuster et al. (US 2014/0114909 A1; published

³ The Final Action indicates that the double-patenting rejection is a non-statutory rejection, but then also indicates that the rejection is under 35 U.S.C. § 101 as claiming the same invention, which is a statutory rejection. *See* Final Act. 5–7. We treat the double-patenting rejection as a non-statutory rejection.

Apr. 24, 2014) (“Schuster”), Brocklebank (US 2010/0257025 A1; published Oct. 7, 2010) (“Brocklebank”), and Cardno et al. (US 2011/0261049 A1; published Oct. 27, 2011) (“Cardno”). *See* Final Act. 13–19.

PRINCIPLES OF LAW

Patent-Eligible Subject Matter

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*, 134 S. Ct. 2347, 2355 (2014) (citing *Mayo Collaborative Services v. Prometheus Labs., Inc.*, 566 U.S. 66, 71–72 (2012)). According to this framework, a determination is made to consider whether the claims at issue are directed to one of those concepts (i.e., laws of nature, natural phenomena, and abstract ideas). *See id.* If so, a further determination must be made to 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 question of whether a claim element or combination of elements is well-understood, routine and conventional to a skilled artisan in the relevant field is a question of fact.” *Berkheimer v. HP Inc.*, 881 F.3d 1360, 1368 (Fed. Cir. 2018).

Obviousness

The Supreme Court has rejected the rigid requirement of demonstrating a teaching, suggestion, or motivation in the references to show obviousness. *See KSR Int’l Co. v. Teleflex Co.*, 550 U.S. 398, 415–16 (2007); *see also In re Ethicon, Inc.*, 844 F.3d 1344, 1350 (Fed. Cir. 2017)

(“KSR directs that an explicit teaching, suggestion, or motivation in the references is not necessary to support a conclusion of obviousness.”).

ANALYSIS

Double Patenting Rejection

Appellant has not identified any errors in the Examiner’s findings regarding the non-statutory double patenting rejection. *See* Appeal Br. 12–26. “If an appellant fails to present arguments on a particular issue — or more broadly, on a particular rejection — the Board will not, as a general matter, unilaterally review those uncontested aspects of the rejection.” *Ex parte Frye*, 94 USPQ2d 1072, 1075 (BPAI 2010) (precedential). Accordingly, we summarily affirm the double patenting rejection.

Rejection of Claims 8 and 11–14 Under 35 U.S.C. § 101 for failure to be in one of the four statutory categories of invention

The Examiner determines that “claim 8 encompasses within its scope signals per se,” and thus, is not directed to one of the four statutory categories of patentability. *See* Final Act. 12–13. However, we agree with Appellant that paragraph 13 of Appellant’s Specification, as a whole, provides a clear disclaimer to the scope of the claimed “computer readable storage medium” to not include transitory signals. *See* App. Br. 19–20 (citing Spec. ¶ 13). Thus, contrary to the Examiner’s finding, claim 8 is directed to one of the four statutory categories of patentability. Accordingly, we do not sustain the rejection of claims 8 and 11–14 under 35 U.S.C. § 101 as not being in one of the four statutory categories of invention.

*Rejection of Claims 8, 11–15, and 18–20 Under 35 U.S.C.
§ 101 as being directed to a judicial exception without
significantly more*

Independent claims 8 and 15 recite a computer program product and computer system for business forecasting and are, therefore, directed to one of the four statutory categories of patentability enumerated by 35 U.S.C. § 101 (process, machine, manufacture, or composition of matter). Applying the first part of the *Alice* analysis, the Examiner finds the claims are directed to an “idea of itself” (*i.e.*, a combination of collecting information, analyzing the collected information, and transmitting the analyzed information), one of the four types of abstract ideas set forth in *Alice*. See Final Act. 8–9; see also Ans. 3. As further found by the Examiner, the combination of collecting information, analyzing the collected information, and transmitting the analyzed information was previously identified by the Federal Circuit as being a patent-ineligible abstract idea. See Final Act. 9 (citing *Electric Power Group, LLC v. Alstom S.A.*, 830 F.3d 1350 (Fed. Cir. 2016)). Applying the second part of the *Alice* analysis, the Examiner finds the claims do not include additional elements that are sufficient to amount to significantly more than the abstract idea because the additional elements are generic computer components claimed to perform their basic functions of storing, retrieving, sending, and processing data, and do not add meaningful limits to practicing the abstract idea. See Final Act. 9–11; see also Ans. 5.⁴

⁴ Although the Examiner’s findings are explicitly directed to independent claim 8, the Examiner further finds: (a) independent claim 15 contains the identified abstract idea, where the additional elements are not significantly more for the reasons provided regarding claim 8; and (b) dependent claims

Beginning with the first step of the *Alice* analysis, we must determine “whether the claims at issue are directed to one of those patent-ineligible concepts,” including abstract ideas. *Alice*, 134 S. Ct. at 2355. In performing this determination, we ask whether the focus of the claims is on a 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, LLC v. Microsoft Corp.*, 822 F.3d 1327, 1335–36 (Fed. Cir. 2016) (citing *Alice*, 134 S. Ct. at 2358–59).

Appellant argues claims 8, 11–15, and 18–20 are not directed to an abstract idea, and instead, are directed toward a particular solution that does not preempt all implementations of “collecting information, analyzing the collected information, and transmitting the analyzed information.” App. Br. 13–14. Appellant further argues the Final Office Action fails to properly take the recited features of the claims into consideration, and instead “paraphrases the features of claims 8, 11–15, and 18–20 in a way that would apply to any computer-implemented process or method.” App. Br. 14. Appellant also asserts a specific technological feature of the claims provides an improvement to computing performance, and thus, the claims are similar to the claims at issue in both *Enfish* and *McRO, Inc. v. Bandai Namco Games America Inc.*, 837 F.3d 1299 (Fed. Cir. 2016). See App. Br. 14–18.

We are not persuaded by Appellant’s arguments. Considering the recited elements of the claims in light of Appellant’s Specification, we agree with the Examiner’s findings that the claims are directed to collecting

11–14 and 18–20 contain the identified abstract idea and no additional elements, when considered individually or in combination, that are significantly more for the reasons provided regarding claim 8. See Final Act. 11.

information regarding business metrics, analyzing the collected information, and transmitting the analyzed information, which is an idea of itself and which is similar to abstract ideas previously identified by courts. *See Electric Power Group*, 830 F.3d at 1353–54 (claims focus on the abstract idea of collecting information, analyzing it, and displaying certain results of the collection and analysis); *see also Intellectual Ventures I LLC v. Erie Indem. Co.*, 850 F.3d 1315, 1327 (Fed. Cir. 2017) (affirming that the invention is drawn to the abstract idea of “creating an index and using that index to search for and retrieve data”).

Appellant’s argument that the claims do not preempt any alleged abstract idea and are therefore patent-eligible is not persuasive. The Federal Circuit has made clear that “the absence of complete preemption does not demonstrate patent eligibility” of a claim. *Ariosa Diagnostics, Inc. v. Sequenom, Inc.*, 788 F.3d 1371, 1379 (Fed. Cir. 2015). Further, we disagree with Appellant’s argument that the Examiner has failed to set forth a *prima facie* case that the claims are patent ineligible. As described above, the Examiner has characterized the claims and analogized to previous court cases holding that a claim is patent ineligible for being directed to an abstract idea. *See* Final Act. 8–9. As such, the Examiner has reasonably shifted the burden to Appellant to persuasively establish that the claims are not directed to an abstract idea. Although Appellant identifies claim elements, such as “the assignment and identification of metadata descriptors to certain business metrics,” and “the resulting processing of metrics based on [the] type of metadata descriptors,” Appellant fails to persuasively establish how the recited claim elements demonstrate that the claims are not directed to an abstract idea. App. Br. 13–14.

Further, we disagree with Appellant’s contention that the claims are directed to a specific improvement in the way computers operate, similar to the claims at issue in *Enfish*, rather than an abstract idea. In *Enfish*, in holding that the claims were patent-eligible, the court stated that the claims recited a specific data structure (i.e., a self-referential table for a computer database) that allowed the computer database to realize specific operational improvements (i.e., increased flexibility, faster search times, and smaller memory requirements). *See Enfish*, 822 F.3d at 1337. Although Appellant argues the claims are directed to an improvement to computing performance by directly determining a forecast for a set of business metrics based on metadata descriptors associated with the metrics as opposed to continually analyzing the metrics using statistical analysis, claim 8 merely recites “the one or more values are determined without the one or more statistical models.” We agree with the Examiner that the aforementioned claim element is merely a design choice regarding how the program runs, and more specifically, is merely a choice to perform a computer operation that utilizes less processing of the data by the computer processor. *See* Ans. 5–6. Such a choice does not add significantly more to the abstract idea. *See* Ans. 6. Thus, contrary to Appellant’s assertion, the claims fail to recite an improvement to the computer system that Appellant argues the claim is directed to. For similar reasons, Appellant’s argument that the claims are directed to technological improvement, similar to the claims at issue in *McRO*, is also not persuasive.

Because we conclude that the claims are directed to an abstract idea, we turn to the next step of the *Alice* analysis. In step two, as previously discussed, we consider the elements of the claims “individually and ‘as an

ordered combination” to determine whether the additional elements “transform the nature of the claim’ into a patent-eligible application.” *Alice*, 134 S. Ct. at 2355 (quoting *Mayo*, 566 U.S. at 78). Appellant did not provide any arguments in addition to the arguments previously described. *See* App. Br. 12–18.

Considering the recited elements of the claims in light of Appellant’s Specification, we agree with the Examiner’s findings that the additional elements are generic computer components recited as performing generic computer functions that are well-understood, routine and conventional activities, and amount to no more than implementing the abstract idea with a computerized system. *See* Final Act. 9–11; *see also* Ans. 5. Evidence supporting the Examiner’s finding that the recited generic computer functions performed by the claimed generic computer components are well-understood, routine and conventional is found in Appellant’s Specification which discloses that “[an analytics device] can be any computing device or a combination of devices . . . capable of executing [the disclosed programs],” “[the analytics device] . . . may . . . include internal and external hardware components as depicted and described in further detail,” and

computer readable program instructions may be provided to a processor of a general purpose computer, special purpose computer, or other programmable data processing apparatus to produce a machine, such that the instructions, which execute via the processor of the computer or other programmable data processing apparatus, creates means for implementing the functions/acts specified in the flowchart and/or block diagram block or blocks.

See Final Act. 10 (citing Spec. ¶ 21); *see also* Ans. 5 (citing Spec. ¶ 17).

Therefore, considering the elements of the claims both individually and in

combination, we conclude there are no additional elements that transform the nature of the claims into a patent-eligible application. *See Alice*, 134 S. Ct. at 2355.

Therefore, we are not persuaded the Examiner erred in finding claims 8, 11–15, and 18–20 reciting patent-ineligible subject matter. Accordingly, we sustain the rejection of claims 8, 11–15, and 18–20 under 35 U.S.C. § 101 as being directed to a judicial exception without significantly more.

Rejection Under 35 U.S.C. § 103

Appellant contends the combination of cited references fails to teach or suggest “a first metadata descriptor. . . wherein the first metadata descriptor indicates that [a] first set of business metrics has a non-predetermined trend,” “a second metadata descriptor. . . wherein (i) the second metadata descriptor indicates that [a] second set of business metrics has a predetermined trend; and (ii) the second metadata descriptor indicates an expressional relationship,” “program instructions to predict one or more values of [a] third set of business metrics based, at least in part, on (a) one or more values of the first set of business metrics; and (b) one or more statistical models,” and

in response to the second metadata descriptor indicating that the second set of business metrics describes the predetermined trend, program instructions to determine one or more values for a fourth set of business metrics based, at least in part, on the expressional relationship indicated by the second metadata descriptor, wherein (i) the fourth set of business metrics is a forecast of the second set of business metrics; and (ii) the one or more values are determined without the one or more statistical models,

as recited in claim 8, and similarly recited in claim 15. *See* App. Br. 26. As argued by Appellant, Schuster's performance metadata fails to include whether a business metric is associated with a predetermined trend or a non-predetermined trend, and thus, Schuster's performance metadata fails to teach or suggest the claimed first metadata descriptor and second metadata descriptor. *Id.* at 22–24. In light of this deficiency, as argued by Appellant, Schuster also fails to teach or suggest the claimed two types of forecasting of business metrics based on the type of trend indicated by the metadata descriptor (*i.e.*, predicting values of a third set of business metrics based, at least in part, on one or more statistical models, and determining values of a fourth set of business metrics based, at least in part, on the expressional relationship indicated by a second metadata descriptor, wherein the values are determined without the one or more statistical models). *See id.* Appellant further argues Brocklebank and Cardno, whether considered individually or in combination with Schuster, fail to cure the deficiencies of Schuster. *Id.* at 24–25.

For the foregoing reasons presented in Appellant's Appeal Brief, we are persuaded by Appellant's contention. Therefore, on this record, we do not sustain the rejection of claims 8 and 15 under 35 U.S.C. § 103, nor of claims 11–14, and 18–20 which depend from one of claims 8 and 15.

DECISION

We summarily affirm the Examiner's rejection of claims 8, 11–15, and 18–20 on the ground of non-statutory double patenting.

We affirm the Examiner's rejection of claims 8, 11–15, and 18–20 under 35 U.S.C. § 101 as being directed to a judicial exception without significantly more.

We reverse the Examiner's rejection of claims 8 and 11–14 under 35 U.S.C. § 101 as not being in one of the four statutory categories of invention.

We reverse the Examiner's rejection of claims 8, 11–15, and 18–20 under 35 U.S.C. § 103.

Because we have affirmed at least one ground of rejection with respect to each claim on appeal, the Examiner's decision is affirmed. *See* 37 C.F.R. § 41.50(a)(1).

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