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EXAMINER

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UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

Ex parte EDWARD LEE

Appeal 2017-001908
Application 14/103,113
Technology Center 3600

Before JENNIFER S. BISK, JOHN A. EVANS and JOHN P. PINKERTON,
Administrative Patent Judges.

BISK, *Administrative Patent Judge.*

DECISION ON APPEAL

Edward Lee (Appellant)¹ appeals under 35 U.S.C. § 134(a) from the Examiner's decision to reject claims 2–10, 12–19, and 21. We have jurisdiction under 35 U.S.C. § 6(b). We affirm.

STATEMENT OF THE CASE

Appellant's invention relates to assessing the financial condition of a merchant by retrieving, from one or more databases, information on (1) merchant aggregated payment card transaction data for a defined time period, and (2) social media information indicative of consumer sentiment of

¹ Appellant identifies the real party in interest as Mastercard International Inc. App. Br. 2.

the merchant for the same period. The information is analyzed to identify correlations. Based on those correlations, an assessment is made of the financial condition of the merchant, and the merchant is notified of any changes in that assessment. *See* Abstract.

Claim 12 is illustrative:

12. A system for assessing the financial condition of a merchant comprising:

one or more databases comprising a first set of information, the first set of information including merchant aggregated payment card transaction data for a defined time period;

one or more social media analysis servers having one or more databases comprising a second set of information, the second set of information including sentiment information that determines the nature of sentiments on social media posts to derive social media information indicative of consumer sentiment of the merchant for the defined time period;

a processor configured to:

analyze the first set of information and the second set of information to identify one or more correlations between the merchant aggregated payment card transaction data and the social media information indicative of consumer sentiment of the merchant; and

assess the financial condition of a merchant, based on the one or more correlations.

THE REJECTION

The Examiner rejected claims 2–10, 12–19, and 21 under 35 U.S.C. § 101 as directed to ineligible subject matter. Final Act. 2–6.²

² Throughout this opinion, we refer to (1) the Final Rejection mailed August 25, 2015 (“Final Act.”); (2) the Appeal Brief filed March 25, 2016 (“App. Br.”); (3) the Examiner’s Answer mailed September 16, 2016 (“Ans.”); and (4) the Reply Brief filed November 16, 2016 (“Reply Br.”).

ANALYSIS

We have reviewed the Examiner’s rejection in light of Appellant’s contentions and the evidence of record. For the following reasons, we sustain the Examiner’s rejection.

To determine whether claims are patent eligible under § 101, we apply the Supreme Court’s two-step test articulated in *Alice Corp. Proprietary Ltd. v. CLS Bank International*, 134 S. Ct. 2347 (2014). First, we determine whether the claims are directed to a patent-ineligible concept: laws of nature, natural phenomena, and abstract ideas. *Id.* at 2354–55. If so, we then proceed to the second step and examine the claim’s elements—both individually and as an ordered combination—to determine whether the claim contains an “inventive concept” sufficient to transform the claimed abstract idea into a patent-eligible application. *Id.* at 2357.

The Federal Circuit has described the *Alice* step-one inquiry as looking at the “focus” of the claims, their “character as a whole,” and the *Alice* step-two inquiry as looking more precisely at what the claim elements add—whether they identify an “inventive concept” in the application of the ineligible matter to which the claim is directed. *See Elec. Power Grp., LLC v. Alstom S.A.*, 830 F.3d 1350, 1353 (Fed. Cir. 2016); *Enfish, LLC v. Microsoft Corp.*, 822 F.3d 1327, 1335–36 (Fed. Cir. 2016); *Internet Patents Corp. v. Active Network, Inc.*, 790 F.3d 1343, 1346 (Fed. Cir. 2015).

Alice Step One

The Examiner finds that the claimed invention is directed to an abstract idea, namely analyzing first and second information and assessing the financial condition of a merchant, based on the one or more correlations. Final Act. 3.

Appellant appears to agree that at least claims 12–15 and 19 are directed to the abstract idea of “assessing the financial condition of a merchant.” Appeal Br. 7 (“Claim 12 is directed to the judicially created exception of an abstract idea, specifically, ‘a system for assessing the financial condition of a merchant.’”). For independent claim 21 and dependent claims 2–4, 9, and 10 that depend from claim 21, Appellant argues that the recitation of “a computer readable non-transitory storage medium storing instructions of a computer program” provides structural limitations such that it qualifies as patent-eligible subject matter. *Id.* at 13–14. Appellant, however, does not point to any authority for this contention. *Id.* Similarly, Appellant contends that claims 5–8 and 16–18, which require “using a computing device,” “clearly comprise[] a structural limitation, and [are] directed to . . . statutory subject matter.” *Id.* at 14–15. Again, Appellant points to no authority to support this contention. To the contrary, the Supreme Court, in *Alice*, states that the mere fact that subject matter is claimed in such a way that it “necessarily exist[s] in the physical, rather than purely conceptual, realm” does not end the § 101 inquiry. *Alice*, 134 S. Ct. at 2358–60. Moreover, *Alice* specifically warns against interpreting § 101 “in ways that make patent eligibility ‘depend simply on the draftsman’s art.’” *Id.*

We agree with the Examiner that claims 2–10, 12–19, and 21 are all directed to an abstract idea, i.e., retrieving and storing information regarding the aggregated payment card transaction data for a defined period and data indicative of consumer sentiment of the merchant for that same period, analyzing the two types of data to identify correlations, and using that analysis to assess the financial condition of a merchant. Our reviewing court

has found similar methods to be abstract ideas. “[W]e have treated collecting information, including when limited to particular content (which does not change its character as information), as within the realm of abstract ideas.” *Elec. Power Grp., LLC v. Alstom S.A.*, 830 F.3d 1350, 1353 (Fed. Cir. 2016) (citations omitted). “In a similar vein, we have treated analyzing information by steps people go through in their minds, or by mathematical algorithms, without more, as essentially mental processes within the abstract-idea category.” *Id.* at 1354. “And we have recognized that merely presenting the results of abstract processes of collecting and analyzing information, without more (such as identifying a particular tool for presentation), is abstract as an ancillary part of such collection and analysis.” *Id.*

Alice Step Two

Because the claims are directed to an abstract idea, we proceed to step two to determine whether the claims include additional limitations that individually, or as an ordered combination, ensure the claims amount to “significantly more” than the abstract idea. *Alice*, 134 S. Ct. at 2357. For example, we look at whether the claims focus on a specific means or method that improves the relevant technology or instead are directed to a result or effect that, itself, is the abstract idea and merely invoke generic processes and machinery. *See Enfish, LLC v. Microsoft Corp.*, 822 F.3d 1327, 1336 (Fed. Cir. 2016).

According to the Examiner, the claimed elements do not add significantly more to the abstract idea such that the claimed invention is rendered patent-eligible because, among other things, the claimed invention merely uses general-purpose computing devices to receive, store, analyze,

and send data. Final Act. 3–6. The Examiner adds that the claimed processor and database are generic and the “type of data being manipulated does not impose meaningful limitations or render the idea less abstract.”

Ans. 8–9.

Appellant argues that the claims recite additional elements that amount to significantly more than the identified abstract idea. Appeal Br. 7–15; Reply Br. 6–10. According to Appellant, the Examiner fails to address the claims as a whole or as an ordered combination. *Id.* at 6. In particular, Appellant argues that the claimed “social media analysis server is not a general-purpose server” because it has “specific detailed structure to accomplish the claimed results that have the information indicative of consumer sentiment of a merchant” and “requires a specialized component to achieve the results,” including “a sentiment analysis module 505, which determines the nature of the sentiments, such as tone and mood, expressed by users in social media posts.” App. Br. 8; Reply Br. 6–10 (citing Spec. ¶¶ 57–61, Figs. 4–5).

The Examiner responds by stating “[t]he additional elements when considered both individually and as a combination do not amount to significantly more than the abstract idea.” Ans. 8. Citing Federal Circuit decisions *Classen Immunotherapies, Inc. v. Biogen IDEC*, 659 F.3d 1057 (Fed. Cir. 2011), *PerkinElmer, Inc. v. Intema Ltd.*, 496 Fed. App’x 65 (Fed. Cir. 2012), and *Cybersource Corp. v. Retail Decisions, Inc.*, 654 F.3d 1366 (Fed. Cir. 2011), the Examiner finds that the focus of Appellant’s claims is capturing information and analyzing the data to produce a result. Ans. 10–11; *also see id.* at 12 (citing *Internet Patents*, 790 F.3d at 1349; *OIP Techs., Inc. v. Amazon.com, Inc.*, 788 F.3d 1359, 1363 (Fed. Cir. 2015); *Content*

Extraction & Transmission LLC v. Wells Fargo Bank, Nat'l Ass'n, 776 F.3d 1343, 1347 (Fed. Cir. 2014); *Digitech Image Techs., LLC v. Elecs. for Imagine, Inc.*, 758 F.3d 1344, 1351 (Fed. Cir. 2014); *Cybersource*, 654 F.3d at 1370)). Additionally, the Examiner explains that “[a]s noted in the Appellant’s specification, the generic processor unit can be any known server or computer processor or software or hardware components” and “there is not a specific or new algorithm noted in the Appellant’s specification to provide a result based on analyzed data.” *Id.* at 11.

We agree with the Examiner. Considered “both individually and as an ordered combination,” the processor, databases, and program steps of Appellant’s claim add nothing that is not already present when the steps are considered separately. *Alice*, 134 S. Ct. at 2355 (quotations omitted) (quoting *Mayo*, 566 U.S. at 78). Appellant has not persuasively argued, nor pointed to evidence supporting the contention, that the social media analysis server is not implemented using generic computer equipment performing routine functions. *See, e.g., Intellectual Ventures I LLC v. Capital One Fin. Corp.*, 850 F.3d 1332, 1341 (Fed. Cir. 2017) (“Rather, the claims recite both a generic computer element—a processor—and a series of generic computer ‘components’ that merely restate their individual functions—i.e., organizing, mapping, identifying, defining, detecting, and modifying.”); *Ultramercial, Inc. v. Hulu, LLC*, 772 F.3d 709, 716 (Fed. Cir. 2014) (quoting *Alice*, 134 S. Ct. at 2357) (“Instead, the claimed sequence of steps comprises only ‘conventional steps, specified at a high level of generality,’ which is insufficient to supply an ‘inventive concept.’”); *buySAFE, Inc. v. Google, Inc.*, 765 F.3d 1350, 1352, 1355 (Fed. Cir. 2014) (finding computer-implemented system for guaranteeing performance of an online transaction

to be ineligible). To the contrary, the Specification makes clear that the social media analysis server is merely generic computer hardware and software that “collects social media from various social media websites,” “stores the collected media in an internal data warehouse,” and “provides access to the warehoused social media to one or more entities.” Spec. ¶ 56. The described data warehouse and other components of the social media analysis server are composed of standard, off-the-shelf equipment and software. *Id.* ¶¶ 56–59; *see also (id.* ¶¶ 68–73 (describing “typical” “devices which are well known in the art”), ¶ 75 (stating that the “disclosure is not limited to a specific configuration of hardware and/or software”), ¶ 85 (describing “a variety of known mathematical techniques,” which “in turn can be used to derive or generate indexing using any of a variety of available analysis algorithms”). Nothing in the Specification indicates any particular improvement in the hardware or software used to implement the abstract idea of assessing the financial condition of a merchant.

Nor do we find Appellant’s reliance on *McRO, Inc. v. Bandai Namco Games America, Inc.*, 837 F.3d 1299 (Fed. Cir. 2016) (*see* Appeal Br. 10–11) persuasive. *McRO*’s claimed process used a combined order of specific rules that rendered information in a specific format that was applied to create a sequence of synchronized, animated characters. *McRO*, 837 F.3d at 1315. Notably, the recited process *automatically animated characters* using particular information and techniques, which, as discussed in the specification, was an improvement over manual three-dimensional animation techniques. *Id.* at 1316.

But unlike *McRO* that improved how the physical display operated to produce better quality images, the claimed invention here analyzes data to

assess the financial condition of a merchant—a mathematical determination (*see, e.g.*, Spec ¶¶ 52, 85) that does not purport to improve a display mechanism as was the case in *McRO*. Although the claimed invention requires computer components, it is the incorporation of those components—not a claimed rule—that purportedly improves the existing process. *Cf. FairWarning IP, LLC v. Iatric Systems, Inc.*, 839 F.3d 1089, 1095 (Fed. Cir. 2016). That the Specification indicates (*see, e.g.*, ¶¶ 56–59, 75, and 85) that standard off-the-shelf computer technology and standard algorithms are usable to implement the claimed invention only bolsters the notion that the claimed invention does not focus on an improvement in computers as tools, but rather focuses on an abstract idea that is implemented using standard computer equipment and functionality as tools. *See Elec. Power*, 830 F.3d at 1354.

In short, the claimed invention does not solve a *technical* problem, but rather solves a *financial* problem, namely determining the financial condition of a merchant, based on the one or more correlations of data. We disagree with Appellant’s contention that the claims improve “another technology or technical field, such as risk management.” *See* Appeal Br. 11. The claims do not, for example, purport to improve the functioning of the processor or memory, or how merchant financial conditions are analyzed or displayed. Nor do they effect an improvement in any other technology or technical field. “At best, the claims describe the automation of the [abstract idea] through the use of generic-computer functions.” *OIP Techs., Inc. v. Amazon.com, Inc.*, 788 F.3d 1359, 1363 (Fed. Cir. 2015). That is not enough to transform an abstract idea into a patent-eligible invention. *See*

Alice, 134 S. Ct. at 2360. *See also* Claims 5 and 16 (reciting “a computing device”); and Claim 21 (reciting “non-transitory storage medium”).

We are also not persuaded by Appellant’s argument that “[t]he second set of information of claim 12 and 21 is not known.” Reply 4–5 (referring to “sentiment information” based on data aggregated from social media). The particular content of collected information is not relevant to whether the claimed subject matter is patent-eligible. *Elec. Power Grp.*, 830 F.3d at 1353 (Fed. Cir. 2016) (citations omitted). For similar reasons, we do not agree with Appellant that, as opposed to the data in *Cybersource*, “the first and second set of information are directed to tangible data.” Reply 5.

Lastly, we find unavailing Appellant’s contention that the Examiner also allegedly failed to consider preemption adequately. *See* Appeal Br. 6–7; Reply Br. 10–11. Where, as here, the claims cover a patent-ineligible concept, preemption concerns “are fully addressed and made moot” by an analysis under the *Alice* framework. *See Ariosa*, 788 F.3d at 1379. The Examiner’s point in this regard is well taken. *See* Ans. 9–10.

For the foregoing reasons, then, the recited elements—considered both individually and as an ordered combination—do not contain an “inventive concept” sufficient to transform the claimed abstract idea into a patent-eligible application. Therefore, we are not persuaded that the Examiner erred in rejecting independent claims 12 and 21.

We also sustain the Examiner’s ineligibility rejection of dependent claims 2–10 and 13–19. *See* Final Act. 5–7 (finding that the dependent claims include no additional elements that add significantly more to the abstract idea). Appellant’s contention that the dependent claims are eligible for the same reasons that the independent claims are eligible (Br. 32) is

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unavailing for the reasons previously discussed. Dependent claims 2–10 and 13–19 call for similar generic components, devices, and functions as independent claims 12 and 21. Appellant has not argued that the additional limitations added by these claims require any non-conventional components, devices, or functions.

Therefore, we are not persuaded that the Examiner erred in rejecting claims 2–10, 12–19, and 21 under § 101.

DECISION

The Examiner’s decision to reject claims 2–10, 12–19, and 21 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). 37 C.F.R. § 1.136(a)(1)(iv).

AFFIRMED