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UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

Ex parte DEBASHIS GHOSH

Appeal 2017-011066
Application 13/935,188
Technology Center 3600

Before JAMES R. HUGHES, CATHERINE SHIANG, and BETH Z. SHAW, *Administrative Patent Judges*.

SHAW, *Administrative Patent Judge*.

DECISION ON APPEAL[1]

Appellant[2] seeks our review under 35 U.S.C. § 134(a) of the Examiner's final rejection of claims 1–9, 13, 15–19, and 21–25, which represent all the pending claims. We have jurisdiction under 35 U.S.C. § 6(b).

We affirm.

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[1] Throughout this Decision we have considered the Appeal Brief filed May 8, 2017 ("App. Br."), the Reply Brief filed August 28, 2017 ("Reply Br."), the Examiner's Answer mailed June 28, 2017 ("Ans."), the Specification filed July 3, 2014 ("Spec."), and the Final Rejection mailed November 4, 2016 ("Final Act.").

[2] Applicant MasterCard International Incorporated is the real party in interest. App. Br. 1.

INVENTION

Appellant's invention is for estimating a value for a real property location based on historical transaction data of a merchant located at the real property location. *See* Spec. ¶ 1.

Claim 1 is illustrative of the claims at issue and is reproduced below:

> 1. A computer-implemented method for estimating a value for a real property location based on historical transaction data associated with merchants conducting business at the real property location, said method implemented using a computing device associated with a payment card network, said method comprising:
>
> receiving merchant location data for a plurality of merchants at the computing device, the merchant location data including data identifying a real property location at which each merchant is located, wherein the computing device processes payment transactions for each merchant of the plurality of merchants;
>
> electronically grouping merchants together from among the plurality of merchants based on the received merchant location data, the electronically grouped merchants being located at the same real property location;
>
> receiving, at the computing device, historical transaction data generated by the computing device, the historical transaction data comprising payment transactions processed by computing device;
>
> receiving an evaluation request message from a user computing device, the evaluation request message comprising data identifying at least one merchant from among the electronically grouped merchants;
>
> determining a merchant cash flow for each merchant of the electronically grouped merchants by multiplying transaction amounts in the historical transaction data by a scaling factor representing an amount of usage of the payment card network in a geographical area where the real property location is located;

> generating, for each merchant from among the plurality of electronically grouped merchants, a plurality of scores based on the merchant cash flow for each merchant, wherein the plurality of scores includes a revenue trend score, a revenue consistency score, a financial success score, a rent payment ability score, and an insurance risk score;
>
> determining an estimated value of the real property location by i) dividing a yearly rent associated with each merchant of the electronically grouped merchants by a capitalization value, ii) calculating a sum that includes the dividend for each merchant of the electronically grouped merchants, and iii) including, in the determination, the plurality of scores; and
>
> transmitting the estimated value of the real property location to the user computing device.

REJECTION

The Examiner rejected claims 1–9, 13, 15–19, and 21–25 under 35 U.S.C. § 101 as directed to patent-ineligible subject matter. Final Act. 2–16.

CONTENTIONS AND ANALYSIS

We review the appealed rejections for error based upon the issues identified by Appellant, and in light of the arguments and evidence produced. For at least the reasons discussed below, we agree with and adopt the Examiner's findings and conclusions in the Final Action and Answer.

The Examiner determines the pending claims are directed to an abstract idea of (i) a fundamental economic practice, (ii) a method of organizing human activities, (iii) an idea, in and of itself, and/or (iv) a mathematical relationship or formula. Final Act. 2. The Examiner also determines additional elements recited in these claims do not amount to significantly more than the abstract idea itself. Final Act. 5. According to

the Examiner, the claims require no more than implementing the abstract idea on a generic computer. *Id.*

Appellant presents several arguments against the 35 U.S.C. § 101 rejection. App. Br. 6–15; Reply Br. 1–12. Appellant contends the claims are not directed to an abstract idea and that the claims amount to significantly more than an abstract idea. *Id.*

Appellant's arguments are unpersuasive. Instead, we find the Examiner has provided a comprehensive response to Appellant's arguments supported by a preponderance of evidence. Ans. 6–23; *see also* Final Act. 2–16. As such, we agree with and adopt the Examiner's findings and explanations provided therein. *Id.*

The Supreme Court has long held that "[l]aws 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 *Assoc. for Molecular Pathology v. Myriad Genetics, Inc.*, 569 U.S. 576, 589 (2013)). The "'abstract ideas' category embodies 'the longstanding rule that '[a]n idea of itself is not patentable.'" *Alice*, 573 U.S. at 218 (alteration in original) (quoting *Gottschalk v. Benson*, 409 U.S. 63, 67 (1972)).

In *Alice*, the Supreme Court set forth an analytical "framework for distinguishing patents that claim laws of nature, natural phenomena, and abstract ideas from those that claim patent-eligible applications of those concepts." *Id.* at 217 (citing *Mayo Collaborative Servs. v. Prometheus Labs., Inc.*, 566 U.S. 66, 75–78 (2012)). The first step in the analysis is to "determine whether the claims at issue are directed to one of those patent-ineligible concepts," such as an abstract idea. *Id.*

If the claims are directed to a patent-ineligible concept, 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 77–80). 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.* at 217–18 (alteration in original) (quoting *Mayo*, 566 U.S. at 72–73). 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 postsolution activity.'" *Bilski v. Kappos*, 561 U.S. 593, 610–11 (2010) (citation omitted).

Appellant argues the claims as a group. *See* App. Br. 6. After undertaking the first step of the *Alice* inquiry, we agree with the Examiner that Appellant's claims are directed to an abstract idea, as explained by the Examiner (e.g., (i) a fundamental economic practice, (ii) a method of organizing human activities, (iii) an idea, in and of itself, and/or (iv) a mathematical relationship or formula). Final Act. 2–5. All the steps recited in Appellant's claims (e.g., "receiving [a] merchant location," "grouping merchants together," receiving historical transaction data, "receiving an evaluation request," "determining a merchant cash flow," generating a plurality of scores, and "determining an estimated value of the real property location"), are abstract processes of organizing information. *C.f. Digitech Image Techs., LLC v. Elecs. for Imaging, Inc.*, 758 F.3d 1344, 1350 (Fed. Cir. 2014) (finding an abstract idea because claims describe a process of

organizing information through mathematical correlations and are not tied to a specific structure or machine). We are not persuaded by Appellant's argument that the Examiner erred by confusing an outcome of the claim with the way in which to achieve the outcome. Reply Br. 5. Rather, the Examiner considered each and every word of the claim, and the claim limitations as a whole, as evidenced by the record. Ans. 17; Final Act. 6–9.

We agree with the Examiner's determination that the claims are directed to determining estimated value of the real property location based on historical data is a mathematical relationship. Contrary to Appellant's position, we conclude that the claims solve a mathematical problem.

Moreover, as the Examiner determined, estimating the value of a property based on historical transaction data is a fundamental economic practice that would fall under the umbrella of managing transactions or sales activities. Ans. 5. Appellant's characterization of the claimed technique, i.e., "independently validating seller cash flow information, thereby mitigating information symmetry between the buyer and the seller through specific rules for using inaccessible third-party transaction data" (Reply Br. 5)—regardless of whether that characterization is accurate—also falls under the umbrella of managing transactions or sales activities. *See Alice*, 573 U.S. at 219–20; *see, e.g.*, *Intellectual Ventures I LLC v. Capital One Bank*, 792 F.3d 1363, 1369–79 (Fed. Cir. 2015) (an advertisement taking into account the time of day and tailoring the information presented to the user based on that information is another "fundamental . . . practice long prevalent in our system"); *Credit Acceptance Corp. v. Westlake Servs.*, 859 F.3d 1044 (Fed. Cir. 2017) (patent claims directed to a system and method for providing financing to allow a customer to purchase a product selected

from an inventory of products maintained by a dealer are patent-ineligible as directed to the abstract idea of processing an application for financing a purchase, an economic practice long prevalent in commerce). Estimating the value of a property based on historical transaction data, or validating seller cash flow information, are fundamental economic practices. Accordingly, we are not persuaded the Examiner erred under the first step of the *Alice* inquiry.

Our reviewing court also concludes receiving, storing, and updating data constitute an abstract idea. *See Elec. Power Grp., LLC v. Alstom S.A.*, 830 F.3d 1350, 1353 (Fed. Cir. 2016) ("collecting information, analyzing it, and displaying certain results of the collection and analysis" is abstract); *In re Salwan*, 681 F. App'x 938, 941 (Fed. Cir. 2017) (nonprecedential) (affirming the rejection under § 101 of claims directed to "storing, communicating, transferring, and reporting patient health information," noting that "while these concepts may be directed to practical concepts, they are fundamental economic and conventional business practices"); *Cyberfone Sys., LLC v. CNN Interactive Grp., Inc.*, 558 F. App'x 988, 992 (Fed. Cir. 2014) (nonprecedential) ("using categories to organize, store, and transmit information is well-established"). Similarly, all the steps executed by claim 1 are abstract processes of receiving, grouping, generating, and transmitting data.

The second step of the *Alice* inquiry indicates that the limitations in Appellant's claims do not add anything "significantly more" to transform them into a patent-eligible application of the abstract concept of calculating a series of vectors. Final Act. 5–6; Ans. 19, 20; *see also Alice*, 573 U.S. at 221–22. We agree with the Examiner that the computer limitations of claim

1 do not add anything "significantly more" than the abstract idea. Final Act. 5–6. As recognized by the Supreme Court, "the mere recitation of a generic computer cannot transform a patent-ineligible abstract idea into a patent-eligible invention." *Alice*, 573 U.S. at 223; *see id.* at 225 (concluding claims "simply instruct[ing] the practitioner to implement the abstract idea of intermediated settlement on a generic computer" are not patent eligible).

Contrary to Appellant's arguments (*see* App. Br. 6–7; Reply Br. 5–6), the claims do not seek to improve any type of computer capabilities, such as a "self-referential table for a computer database" outlined in *Enfish, LLC v. Microsoft Corp.*, 822 F.3d 1327, 1336 (Fed. Cir. 2016). "[M]erely 'configur[ing]' [a] generic computer[] in order to 'supplant and enhance' an otherwise abstract manual process is precisely the sort of invention that the *Alice* Court deemed ineligible for patenting." *Credit Acceptance Corp.*, 859 F.3d at 1056 (second alteration in original).

Appellant appears not to dispute that the claims use generic computer hardware (Reply Br. 5–6), but argues the claims are analogous to the patent-eligible claims in *McRO, Inc. v. Bandai Namco Games America Inc.*, 837 F.3d 1299 (Fed. Cir. 2016). App. Br. 8–13; Reply Br. 5–6. We are not persuaded by Appellant's argument that the claims improve the "collective system of" sources, similar to the patent-eligible claims in *McRO*. App. Br. 15–16. In *McRO*, the Federal Circuit found that "the claims themselves set out meaningful requirements for the first set of rules: they 'define[] a morph weight set stream as a function of phoneme sequence and times associated with said phoneme sequence.'" 837 F.3d at 1313 (alteration in original) (citation omitted). Appellant's claims are directed to automation of conventional estimation of value of real property. *Cf. McRO*, 837 F.3d at

1314 ("This [conventional] activity, even if automated by rules, would not be within the scope of the claims because it does not evaluate sub-sequences, generate transition parameters or apply transition parameters to create a final morph weight set. It is the incorporation of the claimed rules, not the use of the computer, that 'improved [the] existing technological process' by allowing the automation of further tasks." (second alteration in original) (citing *Alice*, 573 U.S. at 223)). As the Examiner concludes, the claims use "data that would ordinarily be considered in a commercial real estate valuation." Ans. 21.

Appellant also relies on *Bascom Global Internet Services, Inc. v. AT&T Mobility LLC*, 827 F.3d 1341 (Fed. Cir. 2016). App. Br. 9–10; Reply Br. 8–12. Contrary to Appellant's arguments, the Federal Circuit did not create a new test in *Bascom* for analyzing claims. Rather, in *Bascom*, the Federal Circuit followed the Supreme Court's guidance for determining whether the claims recite an inventive concept set forth in *Alice*.

Because Appellant's claims are directed to a patent-ineligible abstract concept and do not recite something "significantly more" under the second prong of the *Alice* analysis, we sustain the Examiner's rejection of these claims under 35 U.S.C. § 101 as being directed to non-statutory subject matter in light of *Alice* and its progeny.

DECISION

The decision of the Examiner to reject claims 1–9, 13, 15–19, and 21–25 is affirmed.

No time period for taking any subsequent action in connection with this appeal may be extended under 37 C.F.R. § 1.136(a)(1)(iv).

AFFIRMED