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UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

Ex parte HUCHEN FEI, DONG YANG, and XIAO HONG

Appeal 2016-001302¹
Application 13/417,853²
Technology Center 3600

Before BIBHU R. MOHANTY, MATTHEW S. MEYERS, and
ALYSSA A. FINAMORE, *Administrative Patent Judges*.

MEYERS, *Administrative Patent Judge*.

DECISION ON APPEAL

STATEMENT OF THE CASE

Appellants appeal under 35 U.S.C. § 134(a) from the Examiner’s final rejection of claims 1–16. We have jurisdiction under 35 U.S.C. § 6(b).

We AFFIRM.

¹ Our decision references Appellants’ Appeal Brief (“Appeal Br.,” filed June 22, 2015) and Reply Brief (“Reply Br.,” filed November 10, 2015), the Examiner’s Answer (“Ans.,” mailed September 11, 2015), and Final Office Action (“Final Act.,” mailed February 10, 2015).

² Appellants identify JPMorgan Chase Bank, N.A. as the real party in interest (Appeal Br. 1).

CLAIMED INVENTION

Appellants' claims relate "to techniques for rapidly updating credit scores or other credit information, for instance on a daily or greater basis" (Spec. ¶ 2).

Claim 1 is the only independent claim on appeal. Claim 1 reproduced below, with minor formatting changes and added bracketed notations, is illustrative of the subject matter on appeal:

1. A computer implemented method, comprising:

[a] receiving, periodically, by at least one computer processor, one or more data sets comprising data relating to the creditworthiness of an entity wherein the one or more data sets are received from an organization;

[b] receiving, periodically, by the at least one computer processor, one or more data sets comprising account transaction data relating to one or more accounts associated with the entity;

[c] analyzing, by the at least one computer processor, the one or more data sets comprising data relating to the creditworthiness of the entity and the one or more data sets comprising account transaction data, to the extent they have been received, to determine the presence of a requirement for calculating a measure of creditworthiness, wherein the requirement is based on at least one triggering event; and

[d] using the one or more data sets comprising data relating to the creditworthiness of the entity and the one or more data sets comprising account transaction data, by the at least one computer processor, to the extent they have been received, to periodically determine the measure of creditworthiness based on the requirement using a risk model wherein the periodic determination is based on the presence of a requirement for calculating the measure of creditworthiness and the risk model is associated with an account segment;

[e] wherein the at least one computer processor is located in at least one computing device that is communicatively coupled to a network.

REJECTION

Claims 1–16 are rejected under 35 U.S.C. § 101 as directed to non-statutory subject matter.

ANALYSIS

Appellants argue claims 1–16 as a group (*see* Appeal Br. 2–7; *see also* Reply Br. 2–5). We select claim 1 as representative. Claims 2–16 stand or fall with independent claim 1. *See* 37 C.F.R. § 41.37(c)(1)(iv).

Alice Corp. Pty. Ltd. v. CLS Bank Int’l, 134 S. Ct. 2347 (2014) identifies a two-step framework for determining whether claimed subject matter is judicially-excepted from patent eligibility under § 101.

According to *Alice* step one, “[w]e must first determine whether the claims at issue are directed to a patent-ineligible concept,” such as an abstract idea. *Alice*, 134 S. Ct. at 2355.

The “directed to” inquiry []cannot simply ask whether the claims *involve* a patent-ineligible concept, because essentially every routinely patent-eligible claim involving physical products and actions *involves* a law of nature and/or natural phenomenon—after all, they take place in the physical world. *See Mayo*, 132 S. Ct. at 1293 (“For all inventions at some level embody, use, reflect, rest upon, or apply laws of nature, natural phenomena, or abstract ideas.”) Rather, the “directed to” inquiry applies a stage-one filter to claims, considered in light of the specification, based on whether “their character as a whole is directed to excluded subject matter.” *Internet Patents Corp. v. Active Network, Inc.*, 790 F.3d 1343, 1346 (Fed. Cir. 2015); *see Genetic Techs. Ltd. v. Merial L.L.C.*, 818 F.3d 1369, 1375 (Fed. Cir. 2016) (inquiring into “the focus of the claimed advance over the prior art”).

Enfish, LLC v. Microsoft Corp., 822 F.3d 1327, 1335 (Fed. Cir. 2016). “The ‘abstract idea’ step of the inquiry calls upon us to 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 Texas, LLC v. DIRECTV, LLC*, 838 F.3d 1253, 1257 (Fed. Cir. 2016) (citing *Elec. Power Grp., LLC v. Alstom S.A.*, 830 F.3d 1350, 1353 (Fed. Cir. 2016); *see also Enfish*, 822 F.3d at 1335.

In rejecting claims 1–16, the Examiner finds the claims are “directed to the abstract idea of a fundamental economic practice of processing account transaction data” (Final Act. 5; *see also* Ans. 6), and when viewed as a whole, the claims do not “provide meaningful limitation(s) to transform the abstract idea into a patent eligible application of the abstract idea such that the claim(s) amounts to significantly more than the abstract idea itself” (Final Act. 5). The Examiner further finds independent claim 1,

as a whole, does not amount to significantly more than the abstract idea itself. This is because the claim does not effect an improvement to another technology or technical field; the claim does not amount to an improvement to the functioning of a computer itself; and the claim does not move beyond a general link of the use of an abstract idea to a particular technological environment.

(Final Act. 5; *see also* Ans. 6).

Appellants argue that the Examiner errs in rejecting claims 1–16 as directed to ineligible subject matter because the Examiner “fails to provide any evidentiary support for its conclusory statements that the claimed embodiment is directed towards an abstract idea” (Appeal Br. 2–4; *see also* Reply Br. 2–3). More particularly, Appellants argue that the Examiner

alleges that the claims are directed to “processing account transaction data.” However, the claims are directed to more. Indeed, the account transaction data [are] but one element of the claims that is ultimately used to “determine the measure of creditworthiness” that includes application of a selected “risk model [] associated with an account segment.”

(Appeal Br. 3). However, we agree with the Examiner that the claims are directed broadly to the abstract idea of “processing account transaction data.” And, to the extent Appellants argue that the Examiner erred in adequately supporting this determination by providing analysis (*see* Appeal Br. 2–4; *see also* Reply Br. 2–3), Appellants’ argument is unpersuasive.

There is no requirement that examiners must provide evidentiary support in every case before a conclusion can be made that a claim is directed to an abstract idea. *See, e.g.*, para. IV “July 2015 Update: Subject Matter Eligibility” to 2014 Interim Guidance on Subject Matter Eligibility (2014 IEG), 79 Fed. Reg. 74618 (Dec. 16, 2014) (“The courts consider the determination of whether a claim is eligible (which involves identifying whether an exception such as an abstract idea is being claimed) to be *a question of law*. Accordingly, courts do not rely on evidence that a claimed concept is a judicial exception, and in most cases resolve the ultimate legal conclusion on eligibility without making any factual findings.”) (Emphasis added). We agree that evidence may be helpful in certain situations where, for instance, facts are in dispute. But it is not always necessary. It is not necessary in this case, and based on the above analysis set forth by the Examiner, we are unpersuaded it is necessary in this case.

Instead, we need only look to other decisions where similar concepts were previously found abstract by the courts. *See Amdocs (Israel) Ltd. v. Openet Telecom, Inc.*, 841 F.3d 1288, 1294 (Fed. Cir. 2016) (“Instead of a definition [for what an ‘abstract idea’ encompasses], then, 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.”)

To that end, as noted above, the Examiner finds the claims are “directed to the abstract idea of a fundamental economic practice of processing account transaction data” (Final Act. 5), and more particularly, finds

processing account transaction data as recited in the claim can be performed mentally or by using a “processor” and is similar to the kind of “organizing human activity” at issue in Alice Corp. Although the claims are not drawn to the same subject matter, the abstract idea of processing account transaction data is similar to the abstract idea of managing risk (hedging) during consumer transactions (Bilski) and mitigating settlement risk in financial transactions (Alice Corps.)

(Ans. 6). Broadly, we agree that the Examiner is correct. According to Appellants’ Specification, “the invention relates to a system and method for evaluating the creditworthiness of an account holder of a credit account”

(Spec. ¶ 7). The Specification identifies a first portion of the system

the system and method include a scoring engine 150 which outputs a score indicative of creditworthiness. The scoring engine 150 receives data from a credit data reporting routine 100 and an account data processing routine 120. The credit data reporting routine 100 is typically carried out by one or more credit reporting organizations (also sometimes referred to as credit bureaus) such as Experian, TransUnion, and Equifax.

(*Id.* ¶ 17). The Specification further identifies

a second portion of the system and method for evaluating creditworthiness involves an account data processing routine 120. The account data processing routine 120 involves, among other things, receiving account transaction data 112 (e.g., data relating to credit card purchases) from merchants and manipulating or processing the account transaction data 112 into a format which is useful for predicting creditworthiness.

(*Id.* ¶ 19). And, taking independent claim 1 as representative, the claimed subject matter is generally directed to “[a] computer implemented method”

which includes steps for “receiving . . . one or more data sets comprising data” “receiving . . . one or more data sets comprising account transaction data,” “analyzing . . . one or more data sets comprising data . . . and the one or more data sets comprising account transaction data . . . to determine the presence of a requirement for calculating . . . based on at least one triggering event,” and “using the one or more data sets . . . and the one or more data sets comprising account transaction data . . . to . . . determine the measure of creditworthiness based on the requirement using a risk model.”

In this regard, the concept of “processing account transaction data” to which claim 1 has been found to be directed to is similar to the steps that the Federal Circuit determined were patent ineligible in *Electric Power*. In *Electric Power*, the method claims at issue were directed to performing real-time performance monitoring of an electric power grid by collecting data from multiple data sources, analyzing the data, and displaying the results. *Elec. Power Grp. LLC*, 830 F.3d at 1351–52. The Federal Circuit held that the claims were directed to an abstract idea, explaining that “[t]he advance they purport to make is a process of gathering and analyzing information of a specified content, then displaying the results, and not any particular assertedly inventive technology for performing those functions.” *Elec. Power Grp.*, 830 F.3d at 1354.

More recently, the concept of “using an electronic device to obtain clinical trial data that would otherwise be collected by pen-and-paper diary, and analyzing the data to decide whether to prompt action” was found to be an abstract idea. *eResearchTechnology, Inc. v. CRF, Inc.*, 186 F.Supp.3d 463, 473 (W.D.Pa. 2016), *aff’d*, No. 2016–2281, 2017 WL 1033672 (mem) (Fed. Cir. Mar. 17, 2017) (citing *OIP Techs., Inc. v. Amazon.com, Inc.*, 788

F.3d 1359, 1361–62 (Fed. Cir. 2015) (finding a method comprising (1) testing prices, (2) gathering statistics about how customers reacted to the prices, (3) using that data to estimate outcomes, and (4) acting on estimated outcomes (i.e., automatically selecting and offering new prices based on estimated outcome) to be directed to the abstract idea of price optimization.); *see also Intellectual Ventures I LLC v. Erie Indem. Co.*, 2015 U.S. Dist. LEXIS 129153, at *94 (finding a method of “gathering, storing, and acting on data based on predetermined rules” to be directed to an abstract idea).

Accordingly, we find that independent claim 1 involves nothing more than receiving account transaction data, i.e., “data relating to the creditworthiness,” “account transaction data,” and analyzing the data to generate an updated value — activities squarely within the realm of abstract ideas. *See, e.g., Elec. Power Grp., LLC*, 830 F.3d at 1353–54 (when “the focus of the asserted claims” is “on collecting information, analyzing it, and displaying certain results of the collection and analysis,” the claims are directed to an abstract idea). *See also Accenture Global Servs., GmbH v. Guidewire Software, Inc.*, 728 F.3d 1336, 1344–45 (Fed. Cir. 2013) (claims reciting “generalized software components arranged to implement an abstract concept [of generating insurance-policy-related tasks based on rules to be completed upon the occurrence of an event] on a computer” not patent eligible).

Step two is “a 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.’” *Alice*, 134 S. Ct. at 2355 (alteration in original) (citing

Mayo Collaborative Servs. v. Prometheus Labs., Inc., 132 S. Ct. 1289, 1294 (2012)).

And, similar to the situation in *Electric Power*, we find nothing sufficient to remove the claims from the class of subject matter ineligible for patenting. As the court explained in *Electric Power*, “merely selecting information, by content or source, for collection, analysis, and display does nothing significant to differentiate a process from ordinary mental processes, whose implicit exclusion from § 101 undergirds the information-based category of abstract ideas.” *Elec. Power Grp.*, 830 F.3d at 1355. And, as the Examiner points out, independent claim 13 includes “generic computer components” which “perform their basic functions of receiving, analyzing and periodically determining data through the program that enables the processing of account transaction data” (Ans. 6). Thus, the steps recited by independent claim 1 amount to nothing more than mere instructions to implement the abstract idea on a computer—none of which add inventiveness because they merely require the application of conventional, well-known analytical steps. *See Ultramercial, Inc. v. Hulu, LLC*, 772 F.3d 709, 716 (Fed. Cir. 2014) (“[T]he claimed sequence of steps comprises only ‘conventional steps, specified at a high level of generality,’ which is insufficient to supply an ‘inventive concept.’”) (citing *Alice*, 134 S. Ct. at 2357) (internal citations omitted). There is no indication in the record that any specialized computer hardware or other “inventive” computer components are required. In fact, the Specification merely discloses that the processes recited by independent claim 1 “can be carried out on a system as shown in FIG. 2 which includes computers or computing devices 50, such as server computers, connected via a communication links 60 to a network 70

such as the [I]internet” (Spec. ¶ 23). Thus, each limitation does no more than require a generic computer to perform generic computer functions.

And, considered as an ordered combination, the computer components of Appellants’ independent claim 1 add nothing that is not already present when the limitations are considered separately. Viewed as a whole, Appellants’ claims simply recite the concept of “processing account transaction data” as performed by “computing devices 50, such as server computers” (*see id.*). The claims do not, for example, purport to improve the functioning of the computer itself. Nor do they effect an improvement in any other technology or technical field. Instead, the claims at issue amount to nothing significantly more than an instruction to apply the abstract idea of processing account transaction data, i.e., receiving data and analyzing the data to generate an updated value, which under our precedents, is not enough to transform an abstract idea into a patent-eligible invention. *See Alice*, 134 S. Ct. at 2360.

Appellants also argue that “[g]iven the lack of prior art rejection of the claims and lack of evidence provided by the Office, the elements of the method are hardly ‘well-understood, routine, and conventional activities previously known to the pertinent industry’ as alleged by the Office” (Appeal Br. 5 (citing Final Act. 6)). However, to the extent Appellants argue that the claims necessarily contain an “inventive concept” based on their alleged novelty and non-obviousness over the cited references (*see* Appeal Br. 7), Appellants misapprehend the controlling precedent. That is, although the second step in the *Alice/Mayo* framework is termed a search for an “inventive concept,” the analysis is not an evaluation of novelty or non-obviousness, but rather, a search for “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.’” *Alice*, 134 S. Ct. at 2355. A novel and nonobvious claim directed to a purely abstract idea is, nonetheless, patent-ineligible. *See Mayo*, 132 S. Ct. at 1304.

Appellants further argue that the claims “tie a particular mathematical operation (applying the risk model) to the requirement for calculating a measure of creditworthiness” (Appeal Br. 6). However, Appellants’ argument is not persuasive as a mathematical operation is non-patentable subject matter under *Alice*. *See Alice*, 134 S. Ct. at 2355 (discussing *Parker v. Flook*, 437 U.S. 584, 594–595 (1978)). *See also Digitech Image Techs., LLC v. Elecs. for Imaging, Inc.*, 758 F.3d 1344, 1351 (Fed. Cir. 2014) (“Without additional limitations, a process that employs mathematical algorithms to manipulate existing information to generate additional information is not patent eligible.”) (citing *Flook*); *Louis A Coffelt, Jr., v. Nvidia Corp.*, No. 2017–1119, 2017 WL 999217, at *1 (Fed. Cir. Mar. 15, 2017) (claims held ineligible because they were directed to the “abstract idea of calculating and comparing regions in space” using a generic computer).

Finally, we are not persuaded of Examiner error by Appellants’ argument that “Appellant is not attempting to tie up the entire alleged judicial exception of ‘processing account transaction data,’ for example” (Appeal Br. 6–7). There is no dispute that the Supreme Court has described “the concern that drives this exclusionary principle [i.e., the exclusion of abstract ideas from patent eligible subject matter] as one of pre-emption.” *Alice*, 134 S. Ct. at 2354. But characterizing pre-emption as a driving concern for patent eligibility is not the same as characterizing pre-emption as the sole test for patent eligibility. “The Supreme Court has made clear that

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the principle of preemption is the basis for the judicial exceptions to patentability” and “[f]or this reason, questions on preemption are inherent in and resolved by the § 101 analysis.” *Ariosa Diagnostics, Inc. v. Sequenom, Inc.*, 788 F.3d 1371, 1379 (Fed. Cir. 2015) (citing *Alice*, 134 S. Ct. at 2354). Yet although “preemption may signal patent ineligible subject matter, the absence of complete preemption does not demonstrate patent eligibility.” *Id.*

In view of the foregoing, we sustain the Examiner’s rejection under 35 U.S.C. § 101 of independent claim 1, and claims 2–16, which fall with independent claim 1.

DECISION

The Examiner’s rejection of claims 1–16 under 35 U.S.C. § 101 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