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UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

Ex parte SHARON A. ROSANO

Appeal 2016-004493¹
Application 13/561,955²
Technology Center 3600

Before NINA L. MEDLOCK, TARA L. HUTCHINGS, and
ALYSSA A. FINAMORE, *Administrative Patent Judges*.

FINAMORE, *Administrative Patent Judge*.

DECISION ON APPEAL

STATEMENT OF THE CASE

Pursuant to 35 U.S.C. § 134(a), Appellant appeals from the Examiner's decision to reject claims 1–32. We have jurisdiction under § 6(b). We AFFIRM.

¹ Our Decision references Appellant's Specification ("Spec.," filed July 30, 2012, Appeal Brief ("Appeal Br.," filed Aug. 28, 2015), and Reply Brief ("Reply Br.," filed Mar. 22, 2016), as well as the Examiner's Final Office Action ("Final Act.," mailed Mar. 23, 2015) and Answer ("Ans.," mailed Jan. 22, 2016).

² Appellant identifies MasterCard International Incorporated as the real party in interest. Appeal Br. 1.

SUBJECT MATTER ON APPEAL

The invention “relates generally to systems and methods for processing payment transactions and, more particularly, to systems and methods for processing account-on-file transactions.” Spec. ¶ 2. Claims 1, 9, 17, and 25 are the independent claims on appeal. Independent claim 1, reproduced below, is illustrative of the claimed subject matter:

1. A method for processing a card-not-present account-on-file transaction using a payment network computing device, the transaction made by a cardholder using original payment card information stored by a merchant, the original payment card information including an original expiration date associated with a payment card account identifier, said method comprising:

receiving, by the payment network computing device, a first authorization request message for the transaction, the first authorization request message received at the payment network computing device from an acquirer associated with the merchant, the first authorization request message including the original payment card information;

processing the transaction, including determining, by the payment network computing device, that the first authorization request message is associated with a card-not-present account-on-file transaction based on a first flag present in the first authorization request message;

querying a payment network database while processing the transaction, by the payment network computing device, to determine whether an updated expiration date associated with the payment card account identifier is stored therein, wherein the updated expiration date is later than the original expiration date;

generating, by the payment network computing device, while processing the transaction, a second authorization request message from the first authorization request message by replacing the original expiration date in the first authorization request message with the updated expiration date; and

transmitting, by the payment network computing device, the second authorization request message.

REFERENCES

The Examiner relies on the following prior art in rejecting the claims on appeal:

Templeton et al. (“Templeton”) US 5,679,940 Oct. 21, 1997

DiGioacchino US 2008/0301050 A1 Dec. 4, 2008

Visa USA Inc., *Visa Directions* (Matt Price ed., Spring 2007),
usa.visa.com/download/.../visa_risk_management_guide_ecommerce.pdf
 (“Visa”).

REJECTIONS

The Examiner rejects the claims on appeal as follows:

claims 1–32 under 35 U.S.C. § 101 as non-statutory subject matter;

claims 1–8 under 35 U.S.C. § 103(a) as unpatentable over

DiGioacchino, Templeton, and Visa; and

claims 9–32 under 35 U.S.C. § 103(a) as unpatentable over

DiGioacchino and Visa.

ANALYSIS

Non-Statutory Subject Matter

An invention is patent-eligible if it claims a “new and useful process, machine, manufacture, or composition of matter.” 35 U.S.C. § 101. The Supreme Court, however, has long interpreted § 101 to include implicit exceptions: “[l]aws of nature, natural phenomena, and abstract ideas” are not patentable. *See, e.g., Alice Corp. Pty. Ltd. v. CLS Bank Int’l*, 134 S. Ct. 2347, 2354 (2014) (quoting *Ass’n for Molecular Pathology v. Myriad Genetics, Inc.*, 133 S. Ct. 2107, 2116 (2013)). To “distinguish[] patents that claim laws of nature, natural phenomena, and abstract ideas from those that

claim patent-eligible applications of those concepts,” the Supreme Court, in *Alice*, reiterated the two-step framework previously set forth in *Mayo Collaborative Services v. Prometheus Laboratories, Inc.*, 132 S. Ct. 1289 (2012), which, in the first step, considers whether a claim is directed to a patent-ineligible concept, e.g., an abstract idea, and, if so, considers, in the second step, whether the claim recites an inventive concept—an element or combination of elements sufficient to ensure the claim amounts to significantly more than the abstract idea and transform the nature of the claim into a patent-eligible application. *Alice*, 134 S. Ct. at 2355 (citing *Mayo*, 132 S. Ct. at 1294, 1296–98).

In rejecting the claims under 35 U.S.C. § 101 as non-statutory subject matter, i.e., subject matter judicially excepted from statutory subject matter, the Examiner analyzes the claims using this two-step framework. Final Act. 8–9. Pursuant to the first step, the Examiner determines the claims are directed to “processing a transaction request wherein it is determined a type of card and if card information is updated, wherein if data is not updated, updating card account data.” *Id.* According to the Examiner, “processing a transaction request wherein it is determined a type of card and if card information is updated, wherein if data is not updated, updating card account data,” i.e., updating financial data, is a fundamental economic practice and, therefore, an abstract idea. *Id.* at 9; Ans. 4. Under the second step, the Examiner determines the claims do not recite significantly more than the abstract idea because they do not include an improvement to another technology or technical field, an improvement to the functioning of the computer itself, or meaningful limitations beyond generally linking the

use of the abstract idea to a particular technological environment.

Final Act. 9.

Pursuant to the first step of the patent-eligibility analysis, Appellant argues that the Examiner has failed to set forth a prima facie case because the Examiner merely asserts, without providing any evidence, that the claims are directed to the alleged abstract idea. Appeal Br. 6; Reply Br. 1–3.

Appellant’s argument does not apprise us of error.

Regarding the requirement to make a prima facie case, the Federal Circuit has held:

[T]he PTO carries its procedural burden of establishing a prima facie case when its rejection satisfies 35 U.S.C. § 132, in “notify[ing] the applicant ... [by] stating the reasons for [its] rejection, or objection or requirement, together with such information and references as may be useful in judging of the propriety of continuing the prosecution of [the] application.”

In re Jung, 637 F.3d 1356, 1362 (Fed. Cir. 2011) (alterations in original) (quoting § 132). All that is required of the Office is to set forth the statutory basis of the rejection in a sufficiently articulate and informative manner. *Id.* at 1363; *see also Chester v. Miller*, 906 F.2d 1574, 1578 (Fed. Cir. 1990) (“Section 132 is violated when a rejection is so uninformative that it prevents the applicant from recognizing and seeking to counter the grounds for rejection.”).

As set forth above, in determining that the claims are ineligible, the Examiner evaluates the claims using the two-step analysis for patent eligibility. Final Act. 8–9. In particular, in determining that the claims are directed to an abstract idea pursuant to the first step, the Examiner explains the claims are directed to the concept of “processing a transaction request wherein it is determined a type of card and if card information is updated,

wherein if data is not updated, updating card account data,” which is a fundamental economic practice and, therefore, an abstract idea. *Id.*; Ans. 4. As such, the Examiner sufficiently informs Appellant that the claims are directed to an abstract idea. Furthermore, there is no indication that Appellant does not recognize or understand the Examiner’s determination that the claims are directed to an abstract idea, as Appellant’s understanding is manifested in the arguments traversing it. The Examiner’s rejection satisfies the notice requirement of 35 U.S.C. § 132 and sets forth a prima facie case of patent-ineligible subject matter. We, therefore, consider Appellant’s remaining arguments to determine whether the Examiner erred in rejecting the claims under 35 U.S.C. § 101. *See Ex Parte Frye*, 94 USPQ2d 1072, 1075 (BPAI 2010) (precedential) (explaining that the Board reviews a rejection for error “based upon the issues identified by appellant, and in light of the arguments and evidence produced thereon”).

Appellant contends that the claims are not directed to an abstract idea, as evidenced at least by the limitation reciting “generating, by the payment network computing device, while processing the transaction, a second authorization request message from the first authorization request message by replacing the original expiration date in the first authorization request message with the updated expiration date” in independent claim 1. Appeal Br. 6–7. Appellant also argues that, similar to the claims in *SiRF Technology, Inc. v. International Trade Commission*, 601 F.3d 1319 (Fed. Cir. 2010), the present claims recite specifically configured computer technology, e.g., a payment network computing device and a payment network database. Reply Br. 3. Appellant’s arguments do not apprise us of error.

As a preliminary matter, we note that Federal Circuit’s decision in *SiRF* predates the Supreme Court’s *Alice* decision, and the Federal Circuit’s determination of patent eligibility is based on the machine-or-transformation test set forth in *Bilski*. *SiRF*, 601 F.3d at 1332–33 (citing *Bilski v. Kappos*, 545 F.3d 943 954, 961 (Fed. Cir. 2008)). Since *Alice*, the Federal Circuit has explained that satisfaction of the machine-or-transformation test is not determinative of patent eligibility. *See, e.g., DDR Holdings, LLC v. Hotels.com, L.P.*, 773 F.3d 1245, 1256 (Fed. Cir. 2014) (“[S]atisfying the machine-or-transformation test, by itself, is not sufficient to render a claim patent-eligible, as not all transformations or machine implementations infuse an otherwise ineligible claim with an ‘inventive concept.’”).

That notwithstanding, when determining whether a claim is directed to excluded subject matter, e.g., an abstract idea, pursuant to the first step of the patent-eligibility analysis, our reviewing court has explained that “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.’” *Enfish, LLC v. Microsoft Corp.*, 822 F.3d 1327, 1335 (Fed. Cir. 2016) (quoting *Internet Patents Corp. v. Active Network, Inc.*, 790 F.3d 1343, 1346 (Fed. Cir. 2015)). For computer-implemented inventions in particular, such as the present invention, “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.” *Id.* at 1335–36.

Taking independent claim 1 as an example, the claim recites a method for processing a card-not-present account-on-file transaction, whereby the

transaction is made by a cardholder using the original payment card information stored by a merchant. The method comprises the steps of: receiving a first authorization request message including the original payment card information; processing the first authorization request message by determining that the first authorization request message is associated with a card-not-present account-on-file transaction based on a first flag in the message; querying a database to determine whether the payment card has an updated expiration date that is later than the original expiration; generating, while processing the transaction, a second authorization request message from the first authorization request message by replacing the original expiration date with the updated expiration date; and transmitting the second authorization request message to an issuer. As such, the claimed “receiving,” “processing,” “querying,” “generating,” and “transmitting” steps allow an updated expiration date to be sent to an issuer.

As Appellant points out (Reply Br. 3), independent claim 1 also recites a payment network computing device and a payment network database. There is no indication, however, that the claimed components are something other than generic computing components. *Cf.* Spec. ¶¶ 23 (describing a processor as “any programmable system”), 41 (describing components of system 300).

Moreover, Appellant’s Specification does not describe an improvement to the computer capabilities of the claimed invention. Rather, the Specification explains that the claimed invention addresses the difficulties associated with relying on a cardholder or a merchant to update a payment card expiration date. *See* Spec. ¶ 5 (“Due to wide adoption of the account-on-file payment model by merchants and cardholders, it is

understandably difficult for a cardholder to update each merchant with new payment card expiration dates.”).

In light of the above, the claimed invention uses the recited computing components to perform the functions that enable an updated expiration date to be sent to an issuer. The focus of the claimed invention is not on an improvement in computer capabilities, but rather on a process for updating payment card information for which computing devices are invoked merely as tools. Appellant, therefore, does not apprise us of error in the Examiner’s determination that the character of independent claim 1, as a whole, is directed to the abstract idea of updating financial data.

Appellant also asserts the Examiner has not shown that the claimed recitations are fundamental economic practices. Reply Br. 2. We are unpersuaded of error. As set forth above, the claim limitations do not separate the claimed invention from the concept of updating financial data. Updating the financial data necessary to process transactions is a fundamental economic practice long prevalent in our system of commerce and similar to other concepts the courts have held to be abstract ideas. *Ans. 4–6; see also Amdocs (Isr.) Ltd. v. Openet Telecom, Inc.*, 841 F.3d 1288, 1294 (Fed. Cir. 2016) (“[T]he 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.”). Accordingly, Appellant does not apprise us of error in the Examiner’s determination that the claims are directed to an abstract idea.

Turning to Appellant’s arguments under the second step of the patent-eligibility analysis, Appellant contends that the claims recite significantly more than the abstract idea because they effect an improvement

to the technical field of payment processing by speeding up the updating of payment card information on file with merchants. Appeal Br. 7–8; Reply Br. 3–4. Appellant similarly argues that the claims recite significantly more because, analogous to the claims in *Research Corp. Technologies, Inc. v. Microsoft Corp.*, 627 F.3d 859 (Fed. Cir. 2010), the present claims, by way of the recited “generating” step, combine the steps of detecting specific data and taking defined actions based on the detected data to speed up the electronic processing of transactions. Appeal Br. 8–9.³ Appellant’s arguments are not convincing.

At the outset, we disagree with Appellant that payment processing, in general, is a technical field. *Cf. Research Corp.*, 627 F.3d at 868 (“The invention presents functional and palpable applications in the field of computer technology.”). To the extent processing payments simply involves gathering and analyzing payment information, it is not technical, but rather falls within the realm of abstract ideas. As the Federal Circuit has explained:

Information as such is an intangible. Accordingly, we 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. 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.

³ Appellant cites to the Federal Circuit’s decision in *Research Corp.* for the quoted subject matter on page 9 of the Appeal Brief, but the decision does not include the quoted subject matter. Rather, the quoted subject matter appears to be from Example 3 of the Office’s subject matter eligibility guidance dated January 27, 2015, available at https://www.uspto.gov/sites/default/files/documents/abstract_idea_examples.pdf.

Elec. Power Grp., LLC v. Alstom S.A., 830 F.3d 1350, 1353–54 (Fed. Cir. 2016) (citations omitted).

Moreover, as Appellant points out, the claimed invention improves the speed of payment processing because it avoids the difficulties and delays associated with having a cardholder or merchant update payment card expiration dates. Appeal Br. 7–8 (citing Spec. ¶¶ 5, 65). Even if we agree with Appellant that the claimed “generating” step is the combination of detecting specific data and taking defined actions based on the detected data to speed up payment processing, we nevertheless fail to see how the claims, including the “generating” step, represent something other than the use of generic computer components to automate a financial activity conventionally performed by humans. According to our reviewing court, the use of a computer to perform tasks more quickly or more accurately is not sufficient to render a claim eligible. *See OIP Techs., Inc. v. Amazon.com, Inc.*, 788 F.3d 1359, 1363 (Fed. Cir. 2015) (“[R]elying on a computer to perform routine tasks more quickly or more accurately is insufficient to render a claim patent eligible.”); *Intellectual Ventures I LLC v. Capital One Bank (USA)*, 792 F.3d 1363, 1367 (Fed. Cir. 2015) (“[C]laiming the improved speed or efficiency inherent with applying the abstract idea on a computer [does not] provide a sufficient inventive concept.”); *Bancorp Servs., L.L.C. v. Sun Life Assur. Co. of Can. (U.S.)*, 687 F.3d 1266, 1278 (Fed. Cir. 2012) (“[T]he fact that the required calculations could be performed more efficiently via a computer does not materially alter the patent eligibility of the claimed subject matter.”).

Appellant further argues the Examiner erred in determining that the claims recite computer functions that are well-known, routine, and

conventional in the art. Appeal Br. 9–10; Reply Br. 3. According to Appellant, the claimed “querying” and “generating” steps are unconventional. Appeal Br. 9–10; Reply Br. 3. We are unpersuaded of error.

As set forth above, the second step of the patent-eligibility analysis considers whether a claim recites an element or combination of elements that transforms the nature of the claim into a patent-eligible application. *Alice*, 134 S. Ct. at 2355. As such, the question is not whether a claimed step or combination of steps is unconventional. See *Synopsys, Inc. v. Mentor Graphics Corp.*, 839 F.3d 1138, 1151 (Fed. Cir. 2016) (“[A] claim for a *new* abstract idea is still an abstract idea.”). Rather, the inquiry under the second step is whether the implementation of the abstract idea involves “more than performance of ‘well-understood, routine, [and] conventional activities previously known to the industry.’” *Content Extraction & Transmission LLC v. Wells Fargo Bank, N.A.*, 776 F.3d 1343, 1347–48 (Fed. Cir. 2014) (quoting *Alice*, 134 S. Ct. at 2359).

Here, the claims recite that the abstract idea is implemented via various computing components, such as a payment network computing device. There is no indication, however, that the recited computing components are something other than generic computing components. See Spec. ¶¶ 23 (describing a processor as “any programmable system”), 41 (describing components of system 300). Moreover, there is no indication that the implementation of the claimed steps, including the “querying” and “generating” steps, requires something apart from the well-known, routine, and conventional computer functions of receiving, analyzing, manipulating, and transmitting data. Ans. 14. Accordingly, even if the claims recite steps

that are unconventional, we fail to see how the claimed invention is something other than the generic computer implementation of the abstract idea, which is insufficient to transform the nature of the claim into a patent-eligible application.

In view of the foregoing, Appellant does not apprise us of error in the Examiner's determination that the claims are patent-ineligible, i.e., judicially excepted from statutory subject matter. Accordingly, we sustain the rejection of claims 1–32 under 35 U.S.C. § 101.

Obviousness

Appellant argues that the combined teachings of the cited prior art would not result in the step of “generating, by the payment network computing device, while processing the transaction, a second authorization request message from the first authorization request message by replacing the original expiration date in the first authorization request message with the updated expiration date,” as recited in independent claim 1.

Appeal Br. 10–11; Reply Br. 4–5. Appellant's argument is convincing.

With regard to the claimed “generating” step, the Examiner relies on DiGioacchino's disclosure of a decline of a request for credit for teaching the “first authorization request message.” Ans. 18. DiGioacchino's decline, however, is a denial of a merchant's request for an authorization of credit. DiGioacchino ¶¶ 26–27. The Examiner does not explain, and we fail to see, how DiGioacchino's denial of an authorization request discloses an authorization request.

That notwithstanding, the claimed “generating” step requires that a second authorization request message is generated from the first

authorization request message by replacing the original expiration date in the first authorization request message with the updated expiration date.

DiGiacchino does not disclose that the decline includes the original expiration date. Moreover, although DiGiacchino discloses that after receiving a decline of a request for authorization, a merchant may resubmit a request including additional information (DiGiacchino ¶ 27), DiGiacchino does not disclose that the merchant generates the resubmitted request, i.e., “second authorization request message” from the denial, i.e., “first authorization request message,” as claimed.

In view of the foregoing, the Examiner has not sufficiently shown that DiGiacchino discloses the “generating” step of independent claim 1. We therefore do not sustain the Examiner’s rejection of independent claim 1 and claims 2–8 depending therefrom.

Each of independent claims 9, 17, and 25 includes a limitation that is similar to the “generating” step of independent claim 1, and the Examiner’s rejection of independent claims 9, 17, and 25 is based on the same deficient finding. Ans. 18, 28. Accordingly, we similarly do not sustain the Examiner’s rejection of independent claims 9, 17, and 25 and dependent claims 10–16, 18–24, and 26–32.

DECISION

The Examiner’s decision to reject claims 1–32 under 35 U.S.C. § 101 is affirmed.

The Examiner’s decision to reject claims 1–32 under 35 U.S.C. § 103(a) is reversed.

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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