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UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

Ex parte SHARON A. ROSANO, ERNESTO CABRERA, and
SUSAN SNODGRASS

Appeal 2016-004712¹
Application 11/966,549²
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), Appellants appeal from the Examiner's decision to reject claims 1–25. We have jurisdiction under § 6(b). We AFFIRM.

¹ Our Decision references Appellants' Specification ("Spec.," filed Dec. 28, 2007), Appeal Brief ("Appeal Br.," filed Aug. 28, 2015), and Reply Brief ("Reply Br.," filed Mar. 31, 2016), as well as the Examiner's Final Office Action ("Final Act.," mailed Feb. 26, 2015) and Answer ("Ans.," mailed Feb. 2, 2016).

² Appellants identify 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 recurring payment transactions that include automatically updating payment card records for payment cards registered to be used for the transaction in which the payment card itself is not present.”

Spec. ¶ 1. Claims 1, 10, 17, and 21 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 recurring payment (CNP/RP) transaction using a payment processing computer system coupled to a payment processing database, the CNP/RP transaction including a recurring payment made by a cardholder using payment card information stored by a merchant, the payment card information associated with a payment card issued by an issuer to the cardholder, said method comprising:

receiving, by the payment processing computer system, a first authorization request message for the CNP/RP transaction, the first authorization request message including a flag identifying the transaction as a CNP/RP transaction, and payment card information stored by the merchant and associated with the cardholder, wherein the first authorization request message requests approval of the CNP/RP transaction from the issuer;

automatically instructing the payment processing computer system, in response to the payment processing computer system detecting the flag included within the first authorization request message, to generate a query including the payment card information received in the first authorization request message, the generated query configured to determine whether the payment card information is updated;

electronically querying, by the payment processing system, the payment processing database using the payment processing computer system and the generated query;

determining, by the payment processing system, from the querying that the payment processing database includes updated payment card information for the payment card used in the CNP/RP transaction; and

automatically transmitting the updated payment card information from the payment processing computer system to the merchant in response to the determining of updated payment card information being stored in the payment processing database, thereby enabling the merchant to update the payment card information stored by the merchant to match the updated payment card information transmitted from the payment processing computer system.

REFERENCES

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

DiGiacchino 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").

Jerry M. Rosenberg, Ph.D., *Dictionary of Computers, Information Processing, and Telecommunications* 239 (John Wiley & Sons, 2nd ed.).

REJECTIONS

The Examiner rejects the claims on appeal as follows:
claims 1–25 under 35 U.S.C. § 101 as non-statutory subject matter;
and
claims 1–25 under 35 U.S.C. § 103(a) as unpatentable over
DiGiacchino, Visa, and Rosenberg.

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. 17–20. Pursuant to the first step, the Examiner determines the claims are directed to “performing an authorization and updating of data in a money transfer function,” which is a fundamental economic practice and,

therefore, an abstract idea. *Id.* at 19. Under the second step, the Examiner determines the claims do not include additional elements that amount to significantly more than the abstract idea because they do not: effect an improvement to another technology or technical field; amount to an improvement to the functioning of the computer itself; or move beyond a general link of the use of the abstract idea to a particular technological environment. *Id.* The Examiner further determines that the claims amount to the application or instructions to apply the abstract idea using generic computing components, i.e., a well-understood, routine, and conventional technological environment. *Id.* at 20.

Pursuant to the first step of the patent-eligibility analysis, Appellants argue 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. 7; Reply Br. 1–3.

Appellants’ 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. 17–20. 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 “performing an authorization and updating of data in a money transfer function,” which is a fundamental economic practice and, therefore, an abstract idea. *Id.* at 19. As such, the Examiner sufficiently informs Appellants that the claims are directed to an abstract idea. Furthermore, there is no indication that Appellants do not recognize or understand the Examiner’s determination that the claims are directed to an abstract idea, as Appellants’ 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 Appellants’ 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”).

Appellants contend that the claims are not directed to an abstract idea, as evidenced at least by the limitation reciting

automatically instructing the payment processing computer system, in response to the payment processing computer system detecting the flag included within the first authorization request message, to generate a query including the

payment card information received in the first authorization request message, the generated query configured to determine whether the payment card information is updated.

Appeal Br. 7–8. Appellants also argue 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 processing computer system and a payment processing database. Reply Br. 3. Appellants’ 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 CNP/RP transaction, whereby the CNP/RP transaction is made by a cardholder using payment card information stored by a merchant. The method comprises the steps of: receiving a first authorization request message for the CNP/RP transaction including a flag identifying the transaction as a CNP/RP transaction and payment card information stored by a merchant; in response to detecting the flag included with the first authorization request message, automatically generating a query configured to determine whether the payment card information is updated; querying a payment processing database using the query; determining that the payment processing database includes updated payment card information; and automatically transmitting the updated payment information to the merchant in response to the determining of updated payment card information is stored in the payment processing database to thereby enable the merchant to update the payment card information stored by the merchant. As such, the claimed steps, including the step of automatically generating a query, allow a merchant to update the payment card information stored by the merchant.

As Appellants point out (Reply Br. 3), independent claim 1 also recites a payment processing computer system and a payment processing database. There is no indication, however, that the claimed components are

something other than generic computing components. *Cf.* Spec. ¶ 22 (describing the financial card payment system), Fig. 2.

Moreover, Appellants' Specification does not describe an improvement to the computer capabilities of the claimed invention. Rather, the Specification explains that the claimed invention addresses the need for "a system and method for real-time updating of payment card information stored by a merchant . . . wherein the payment card information is updated, and the transaction is authorized or denied at the time of the transaction." Spec. ¶ 5.

In light of the above, the claimed invention uses the recited computing components to perform the functions that enable a merchant to update the payment card information stored by the merchant. 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. Appellants, therefore, do 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 "performing an authorization and updating of data in a money transfer function."

Appellants also assert 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 "performing an authorization and updating of data in a money transfer function." Requesting authorization and 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. 4–12; *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, Appellants do not apprise us of error in the Examiner’s determination that the claims are directed to an abstract idea.

Turning to Appellants’ arguments under the second step of the patent-eligibility analysis, Appellants contend 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 stored by merchants. Appeal Br. 8–9; Reply Br. 3–4. Appellants similarly argue 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 “automatically instructing” 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. 9–10.³ Appellants’ arguments are not convincing.

At the outset, we disagree with Appellants that payment processing, in general, is a technical field. *Cf. Research Corp.*, 627 F.3d at 868 (“The

³ Appellants cite 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.

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.

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

Moreover, as Appellants point 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 information. Appeal Br. 8–9 (citing Spec. ¶¶ 2–4, 34). Even if we agree with Appellants that the claimed “automatically instructing” 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 “automatically instructing” 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.”).

Appellants further argue the Examiner erred in determining that the claims recite computer functions that are well-known, routine, and conventional in the art. Appeal Br. 10–11; Reply Br. 3. According to Appellants, the claimed “automatically instructing” step is unconventional. Appeal Br. 10–11; 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 processing computer system and a payment processing database. However, as set forth above, there is no indication that the recited computing components are something other than generic computing components. Moreover, there is no indication that the implementation of the claimed steps, including the “automatically instructing” step, requires something apart from the well-known, routine, and conventional computer functions of receiving, analyzing, 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, Appellants do 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 1–25 under 35 U.S.C. § 101.

Obviousness

Appellants argue that the combined teachings of the cited prior art would not result in the step of

automatically instructing the payment processing computer system, in response to the payment processing computer system detecting the flag included within the first authorization request message, to generate a query including the payment card information received in the first authorization request message, the generated query configured to determine whether the payment card information is updated,

as recited in independent claim 1. Appeal Br. 11–12; Reply Br. 4–5. Appellants’ argument is convincing.

With regard to the claimed “automatically instructing” step, the Examiner relies on DiGioacchino’s disclosure of a merchant accessing a financial service provider’s computing systems for information about an account holder’s account in response to a denial of the merchant’s request for an authorization of credit. Final Act. 22; Ans. 15–17. Accordingly, we understand the Examiner to be relying on DiGioacchino’s denial for teaching the “first authorization request message.” The Examiner, however, does not explain, and we fail to see, how DiGioacchino’s denial of an authorization request discloses the authorization request.

That notwithstanding, the claimed “automatically instructing” step requires that the query includes the payment card information received in the first authorization request message. DiGioacchino does not disclose that the denial includes the payment card information.

In view of the foregoing, the Examiner has not sufficiently shown that DiGioacchino discloses the “automatically instructing” step of independent claim 1. Each of independent claims 10, 17, and 21 includes a limitation that is similar to the “automatically instructing” step of independent claim 1, and the Examiner’s rejection of independent claims 10, 17, and 21 is based on the same deficient finding. Final Act. 33, 43, 52. Accordingly, we do not sustain the Examiner’s rejection of independent claims 1, 10, 17, and 21 and dependent claims 2–9, 11–16, 18–20, and 22–25.

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DECISION

The Examiner's decision to reject claims 1–25 under 35 U.S.C. § 101 is affirmed.

The Examiner's decision to reject claims 1–25 under 35 U.S.C. § 103(a) is reversed.

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