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UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

Ex parte WILLIAM M. FERGUSON, STEVEN A. WICKERT,
MARY A. REEDER, and ANU K. PATHRIA¹

Appeal 2017-009258
Application 13/030,794
Technology Center 3600

Before JAMES R. HUGHES, CATHERINE SHIANG, and
JOHN P. PINKERTON, *Administrative Patent Judges*.

HUGHES, *Administrative Patent Judge*.

DECISION ON APPEAL

STATEMENT OF THE CASE

Appellants seek our review under 35 U.S.C. § 134(a) of the Examiner's decision rejecting claims 1–11 and 21–30. Claims 12–20 have been canceled. Final Act. 1–2.² We have jurisdiction under 35 U.S.C. § 6(b).

¹ The real party in interest, according to Appellants, is Visa International Service Association. *See* Appeal Br. 2.

² We refer to Appellants' Specification ("Spec.") filed Feb. 18, 2011 (claiming benefit of 61/306,369 filed Feb. 19, 2010); Appeal Brief ("Appeal Br.") filed Dec. 5, 2016; Supplemental Appeal Brief ("Supp. App. Br.") filed Dec. 28, 2016; and Reply Brief ("Reply Br.") filed June 14, 2017. We also refer to the Examiner's Final Office Action (Final Rejection) ("Final Act.") mailed July 1, 2016, and Answer ("Ans.") mailed Apr. 14, 2017.

We affirm.

Appellants' Invention

The invention “relates generally to authentication of financial account transactions . . . and, more specifically, to computerized authentication of transactions” (Spec. ¶ 2). *See* Spec. ¶¶ 3, 15–17; Abstract.

Representative Claim

Independent claim 1, reproduced below, further illustrates the invention:

1. A method implementable in a computing system, comprising:

storing, with at least one processing device, an indication of a location of a pending travel destination in a memory device, the indication of the location of the pending travel destination based at least on a posting of a travel-related financial transaction, the posting resulting from a posting transaction that triggers a money transfer from an issuer bank to a merchant bank;

receiving, with the at least one processing device, a current transaction authorization request for a current transaction from a point of service;

determining, with the at least one processing device, that a location of the point of service and the location of the pending travel destination obtained from the posting of the travel-related financial transaction are within a predetermined distance;

after determining that the location of the point of service and the location of the pending travel destination are within the predetermined distance, determining, with the at least one processing device, that the current transaction is low risk;

generating, with the at least one processing device, a transaction approval indication when the location of the point of service and the location of the pending travel destination are within the predetermined distance; and

transmitting, with the at least one processing device, the transaction approval indication to the point of service.

Rejection on Appeal

The Examiner rejects claims 1–11 and 21–30 under 35 U.S.C. § 101 as being directed to patent-ineligible subject matter.

ISSUE

Based upon our review of the record, Appellants’ contentions, and the Examiner’s findings and conclusions, the issue before us follows:

Did the Examiner err in finding Appellants’ claims were directed to patent-ineligible subject matter under 35 U.S.C. § 101?

ANALYSIS

The Examiner rejects claims 1–11 and 21–30 as a group based on claim 1 (*see* Final Act. 2–5) and concludes claim 1 is directed to patent-ineligible subject matter in that claim 1 is “directed to a series of steps for a travel-related financial transaction, which are a fundamental economic practice,” which “consist of mere methods and instructions to apply the abstract idea,” and do not recite an “improvement to another technology or technical field, [nor] improvements to the functioning of the computer itself, [nor] meaningful limitations beyond generally linking the use of an abstract idea to a particular technical environment.” Final Act. 2; *see* Final Act. 3–5; Ans. 2–7. The Examiner further determines that “[t]he claims do not include additional elements that are sufficient to amount to significantly more than the judicial exception because the claims require no more than a general purpose computer to perform generic computer functions that are well-

understood, routine and conventional.” Final Act. 2; *see* Final Act. 3–5; Ans. 2–7.

Appellants contend the Examiner erred in rejecting the claims as being directed to patent-ineligible subject matter. *See* Appeal Br. 7–12; Reply Br. 2–6. Specifically, Appellants contend that “the claims are not directed to an ‘abstract idea’” (Appeal Br. 7) and that the Examiner has not properly identified the purportedly abstract idea—“the Examiner has failed to establish that the abstract idea is ‘similar to at least one concept that the courts have identified as an abstract idea’ or that the alleged abstract idea was well known.” Appeal Br. 7–8; *see* Reply Br. 2–5. Appellants also contend claim 1 (and independent claim 21) do not preempt the Examiner’s proposed abstract idea (i.e., recite a practical application)—“the claims recite meaningful limitations that sufficiently limit the practical application of the alleged abstract idea of ‘travel-related financial transactions’ and thus do ‘not seek to tie up any judicial exception such that others cannot practice it’ and constitute patent-eligible subject matter.” Appeal Br. 8–9; *see* Reply Br. 5. Appellants further contend the claims are “rooted in computer technology . . . [and] overcome a problem specifically arising in the realm of computer technology” similar to the claims in *DDR Holdings*. Appeal Br. 9; *see* Appeal Br. 9–10; Reply Br. 5 (citing *DDR Holdings, LLC v. Hotels.com, L.P.*, 773 F.3d 1245 (Fed. Cir. 2014)). Additionally, Appellants contend the claims “recite significantly more than the judicial exception” (Appeal Br. 10) in that the claims recite “specific limitation[s] other than what is well-understood, routine and conventional in the field” (Appeal Br. 11) and represent an improvement in a technological field—“an improved transaction processing system that reduces the number of declined

transactions relative to conventional transaction processing system” (Appeal Br. 11 (emphasis omitted)). *See* Appeal Br. 10–12; Reply Br. 5–6.

Under 35 U.S.C. § 101, a patent may be obtained for “any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof.” The Supreme Court has “long held that this provision contains an important implicit exception: Laws of nature, natural phenomena, and abstract ideas are not patentable.” *Alice Corp. Pty. v. CLS Bank Int’l*, 573 U.S. 208, 216 (2014) (quoting *Ass’n for Molecular Pathology v. Myriad Genetics, Inc.*, 569 U.S. 576, 589 (2013)).

The Supreme Court, in *Alice*, reiterated the two-step framework previously set forth in *Mayo Collaborative Services v. Prometheus Laboratories, Inc.*, 566 U.S. 66, 77–80 (2012), “for distinguishing patents that claim laws of nature, natural phenomena, and abstract ideas from those that claim patent-eligible applications of those concepts.” *Alice*, 573 U.S. at 217. Assuming that a claim nominally falls within one of the statutory categories of machine, manufacture, process, or composition of matter, the first step in the analysis is to “determine whether the claims at issue are directed to one of those patent-ineligible concepts” (*id.*), e.g., to an abstract idea. *See Alice*, 573 U.S. at 219 (“On their face, the claims before us are drawn to the concept of intermediated settlement, i.e., the use of a third party to mitigate settlement risk.”); *see also Bilski v. Kappos*, 561 U.S. 593, 611 (2010) (“Claims 1 and 4 in petitioners’ application explain the basic concept of hedging, or protecting against risk.”). Concepts determined to be abstract ideas, and thus patent ineligible include, but are not limited to, certain methods of organizing human activity, such as fundamental economic practices (*Alice*, 573 U.S. at 219–20; *Bilski*, 561 U.S. at 611); mathematical

formulas (*Parker v. Flook*, 437 U.S. 584, 594–95 (1978)); and mental processes (*Gottschalk v. Benson*, 409 U.S. 63, 69 (1972)). If the claims are not directed to an abstract idea, the inquiry ends. Otherwise, the inquiry proceeds to the second step of the *Alice* and *Mayo* framework where the elements of the claims are considered “individually and ‘as an ordered combination’ to determine whether the additional elements ‘transform the nature of the claim’ into a patent-eligible application.” *Alice*, 573 U.S. at 217 (quoting *Mayo*, 566 U.S. at 78–79). This second step is described as “a search for an ‘inventive concept’—*i.e.*, an element or combination of elements that is ‘. . . significantly more than . . . the [ineligible concept] itself.’” *Id.* at 217–18 (alteration in original) (quoting *Mayo*, 566 U.S. at 72–73). “A claim that recites an abstract idea must include ‘additional features’ to ensure ‘that the [claim] is more than a drafting effort designed to monopolize the [abstract idea].’” *Alice*, 573 U.S. at 221 (quoting *Mayo*, 566 U.S. at 77). “[M]erely requir[ing] generic computer implementation[] fail[s] to transform that abstract idea into a patent-eligible invention.” *Id.*

The Court acknowledged in *Mayo* that “all inventions at some level embody, use, reflect, rest upon, or apply laws of nature, natural phenomena, or abstract ideas.” *Mayo*, 566 U.S. at 71. We, therefore, look to whether the claims focus on a specific means or method that improves the relevant technology or are instead 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).

The PTO recently published revised guidance on the application of § 101. USPTO’s *2019 Revised Patent Subject Matter Eligibility Guidance*,

84 Fed. Reg. 50 (Jan. 7, 2019) (hereinafter “2019 Revised Guidance”).

Under that guidance, we first look to whether the claim recites:

- (1) any judicial exceptions, including certain groupings of abstract ideas (i.e., mathematical concepts, certain methods of organizing human interactions such as a fundamental economic practice, or mental processes); and
- (2) additional elements that integrate the judicial exception into a practical application (*see* MPEP § 2106.05(a)–(c), (e)–(h)).

Only if a claim (1) recites a judicial exception and (2) does not integrate that exception into a practical application, do we then look to whether the claim:

- (3) adds a specific limitation beyond the judicial exception that is not “well-understood, routine, conventional” in the field (*see* MPEP § 106.05(d)); or
- (4) simply appends well-understood, routine, conventional activities previously known to the industry, specified at a high level of generality, to the judicial exception.

See 2019 Revised Guidance.

Eligibility Analysis—Alice Step 1 (Revised Guidance Steps 1 and 2A)

Turning to the first step of the eligibility analysis, “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.” *Enfish*, 822 F.3d at 1335–36. “The abstract idea exception prevents patenting a result where ‘it matters not by what process or machinery the result is accomplished.’” *McRO, Inc. v. Bandai Namco*

Games Am. Inc., 837 F.3d 1299, 1312 (Fed. Cir. 2016) (quoting *O'Reilly v. Morse*, 56 U.S. (15 How.) 62, 113 (1853)).

The Examiner determines independent claim 1 is directed to the abstract idea of providing “travel-related financial transaction[s], which are a fundamental economic practice.” Final Act. 2. Here, in rejecting the claims (in particular claim 1) under 35 U.S.C. § 101, the Examiner analyzed the claims using the *Mayo/Alice* two-step framework, consistent with the guidance set forth in the USPTO’s “2014 Interim Guidance on Patent Subject Matter Eligibility,” 79 Fed. Reg. 74618 (Dec. 16, 2014), in effect at the time the rejection was made, i.e., on July 1, 2016. We agree with the Examiner that Appellants’ claim 1 (and the other pending claims) are directed to patent-ineligible abstract ideas or concepts. In view of the 2019 Revised Guidance, we clarify and expand the Examiner’s reasoning as follows.

Claim 1 recites a method for authorizing a transaction (approving a transaction authorization request, or providing a transaction approval). The claim recites a method (process) which is a statutory category of invention (subject matter) (USPTO’s Step 1). The method provides a transaction approval by (1) determining and storing a pending travel destination location indication—determining a location of a pending travel destination utilizing (based on) a posting of a travel-related financial transaction that triggers a money transfer from an issuer bank to a merchant bank and storing an indication of the pending travel destination in memory; (2) receiving a (current) transaction authorization request from a point of service (“POS”) (e.g., a merchant or ATM); (3) determining that a location of the POS and the location of the pending travel destination are within a predetermined

distance—which intrinsically requires ascertaining a location of the POS prior to the determination (that the locations are within a predetermined distance); (4) determining that the current transaction is low risk; and (5) generating a transaction approval indication (when the locations are within a predetermined distance), and transmitting the transaction approval indication to the point of service.

Utilizing this interpretation of claim 1, we analyze whether the claim is directed to an abstract idea (USPTO’s Step 2A). Here, Appellants’ claims generally, and independent claim 1 in particular, relate to authorizing a transaction or providing a transaction approval. That is, ascertaining/determining a pending travel destination location, analyzing whether a location of the POS (from which a transaction authorization request is received) and the location of the pending travel destination are within a predetermined distance, determining that the current transaction is low risk, and approving the transaction request (generating and transmitting a transaction approval to the POS) utilizing a processing device. This is consistent with how Appellants describe the claimed invention. *See* Appeal Br. 2–3 (citing Spec. ¶¶ 15–17; Fig. 2).

Appellants’ claim 1 recites a judicial exception (USPTO’s Step 2A, Prong 1; *see* 2019 Revised Guidance). Providing a transaction approval by the process of ascertaining a pending travel destination location, ascertaining a location (POS location) from which a transaction authorization request is received, analyzing whether the POS location and the location of the pending travel destination are within a predetermined distance, determining that the current transaction is low risk, and approving the transaction request (generating and transmitting a transaction approval to the point of service) is

a method of organizing human activity, in particular, a fundamental economic practice.

Transaction authorization processes are well-known business practices that are not patent eligible. *See Smart Sys. Innovations, LLC v. Chicago Transit Auth.*, 873 F.3d 1364, 1371–72 (Fed. Cir. 2017) (“Taken together, the Asserted Claims are directed to the formation of financial transactions in a particular field . . . and data collection related to such transactions,” which is “an abstract idea under *Alice* step one.”); *Content Extraction & Transmission LLC v. Wells Fargo Bank, Nat’l Ass’n*, 776 F.3d 1343, 1347 (Fed. Cir. 2014) (summarizing precedent in which “claims directed to the performance of certain financial transactions” involve abstract ideas and holding that claims drawn to the abstract concept of financial transaction-related “data collection, recognition, and storage is undisputedly well-known.”); *CyberSource Corp. v. Retail Decisions, Inc.*, 654 F.3d 1366, 1370 (Fed. Cir. 2011) (finding computer-implemented system for “verifying the validity of a credit card transaction over the Internet” to be patent-ineligible subject matter); *see also Smartflash LLC v. Apple Inc.*, 680 F. App’x 977, 982 (Fed. Cir. 2017) (claims directed to “conditioning and controlling access to data based on payment,” i.e., authorizing access based on payment validation (transaction approval) is an abstract idea—specifically, a “fundamental economic practice.”).

Appellants’ claim 1 also recites additional elements beyond the abstract transaction approval process (the judicial exception) (*supra*). These elements include: (1) utilizing a processing device to store an indication of the pending travel destination location—“storing, with at least one processing device, an indication of a location of a pending travel destination

in a memory device” (claim 1); (2) utilizing the processing device to receive a current transaction authorization request—“receiving, with the at least one processing device, a current transaction authorization request” (claim 1); (3) utilizing the processing device to analyze information, i.e., whether the POS location and the location of the pending travel destination are within a predetermined distance and if the current transaction is low risk; and (4), utilizing the processing device to approve the transaction request (generating and transmitting a transaction approval to the point of service).

We evaluate these additional elements to determine whether the additional elements integrate the abstract transaction approval process (the judicial exception) into a practical application of the exception (USPTO’s Step 2A, Prong 2; *see* 2019 Revised Guidance). Appellants contend (*supra*) that the claims do not preempt the abstract idea and “recite meaningful limitations that sufficiently limit the practical application of the alleged abstract idea.” Appeal Br. 8. We disagree. Appellants’ additional elements (or the combination of the additional elements) do not apply or use the transaction approval process (the judicial exception) in a manner that imposes a meaningful limit on the judicial exception, such that it is more than a drafting effort designed to monopolize the exception. *See Alice*, 573 U.S. at 221–24 (citing *Mayo*, 566 U.S. at 78–85). Rather, Appellants’ claims recite a processing device (a computer) that is utilized as a tool to perform the transaction approval process (the abstract idea). Utilizing a computer as a tool to perform the abstract idea does not impose a meaningful limit on the abstract idea. *See* MPEP § 2106.05(f); *see also Alice*, 573 U.S. at 223 (“if [the] recitation of a computer amounts to a mere instruction to

implement an abstract idea on . . . a computer that addition cannot impart patent eligibility” (quotations and internal citations omitted)).

Appellants also contend (*supra*) that their claims are “rooted in computer technology” and “overcome a problem specifically arising in the realm of computer technology.” Appeal Br. 9. Again, we disagree. Appellants’ claims can also be distinguished from patent-eligible claims such as those in *McRO*, *Enfish*, and *DDR Holdings* that are directed to “a specific means or method that improves the relevant technology” (*McRO*, 837 F.3d at 1314), or “a specific improvement to the way computers operate” (*Enfish*, 822 F.3d at 1336), or a method “rooted in computer technology in order to overcome a problem specifically arising in the realm of computer [technology]” (*DDR Holdings*, 773 F.3d at 1257). Contrary to Appellants’ arguments, claim 1 is not a technological improvement or an improvement in a technology. Appellants’ claim 1 does not “improve the functioning of the computer itself” or “any other technology or technical field.” *Alice*, 573 U.S. at 225. Nor, does it provide a technological solution to a technological problem. *See DDR Holdings*, 773 F.3d at 1257. *See* MPEP § 2106.05(a). Rather, Appellants’ claims and, in particular, the above-identified additional elements are similar to the claims in *Alice* (*see Alice*, 573 U.S. at 225–26) and *Versata Dev. Grp., Inc. v. SAP Am., Inc.*, 793 F.3d 1306, 1333–34 (Fed. Cir. 2015) in that the instant claims implement a known business practice utilizing a general purpose computer.

In summary, “the focus of the claims is not on such an improvement in computers as tools, but on certain independently abstract ideas that use computers as tools.” *Elec. Power Grp., LLC v. Alstom S.A.*, 830 F.3d 1350, 1354 (Fed. Cir. 2016). Thus, we agree with the Examiner that the claims are

directed to the abstract idea of performing “a series of steps for a travel-related financial transaction, which are a fundamental economic practice” (Final Act. 2), or as we clarify (*supra*), performing a transaction approval process utilizing a generic computer.

Alice Step 2 Analysis

Having concluded Appellants’ claims are directed to an abstract idea under *Alice*’s step 1 analysis, we next address whether the claims add significantly more to the alleged abstract idea. As directed by our reviewing court, we search for an “‘inventive concept’ sufficient to ‘transform the nature of the claim into a patent-eligible application.’” *McRO*, 837 F.3d at 1312 (quoting *Alice*, 573 U.S. at 217). The implementation of the abstract idea involved must be “more than performance of ‘well-understood, routine, [and] conventional activities previously known to the industry.’” *Content Extraction*, 776 F.3d at 1347–48 (alteration in original) (quoting *Alice*, 573 U.S. at 225). The “inventive concept” “must be significantly more than the abstract idea itself, and cannot simply be an instruction to implement or apply the abstract idea on a computer.” *Bascom Global Internet Servs., Inc. v. AT&T Mobility LLC*, 827 F.3d 1341, 1349 (Fed. Cir. 2016) (citation omitted).

Here, the Examiner determined that Appellants’ claims do not add significantly more:

The claims do not include additional elements that are sufficient to amount to significantly more than the judicial exception because they require no more than a generic computer to perform generic computer functions (e.g., storing, generating, receiving and transmitting transaction) that are well-understood, routine and conventional activities previously known in the industry.

Final Act. 3; *see* Final Act. 2–5; Ans. 5–7. Appellants, on the other hand, simply state that “the recited claims include many [] additional features” (Appeal Br. 10) without explaining how such features are not well-understood or unconventional. *See* Appeal Br. 10–12; Reply Br. 5–6.

Appellants fail to persuade us of error in the Examiner’s rejection with respect to the second *Alice* step. We agree with the Examiner that Appellants’ claim 1 (and the other pending claims) does not evince an “inventive concept” that is significantly more than the abstract idea itself. Appellants fail to explain how the additional features (additional elements, *see supra*) (individually and in combination) are not routine or are unconventional.

As previously discussed, claim 1 (and the other pending claims) merely recites utilizing a processing device (a conventional computer) to store, receive, and analyze information, and to generate and transmit a transaction approval. Appellants’ Specification describes the processing device as a conventional (generic) computer. Indeed, the only description provided in Appellants’ Specification for the recited “processing device” delineates a “processor” (processor 102) that is part of a “computerized system,” including an interface and memory, communicating with a “data store.” Spec. ¶ 11. Further, Appellants’ Specification explains that “the processor [] analyzes information previously stored in the . . . data store” (Spec. ¶ 16), and “although the system 100 is shown as being separate from the bank 112, the system 100 may be integrated within the systems of the bank 112 rather than existing as a separate system accessed over a network” (Spec. ¶ 25).

Such conventional computer processes operating on conventional computer hardware “do not alone transform an otherwise abstract idea into patent-eligible subject matter.” *FairWarning IP, LLC v. Iatric Sys., Inc.*, 839 F.3d 1089, 1096 (Fed. Cir. 2016)(citing *DDR Holdings*, 773 F.3d at 1256).

For at least the reasons discussed above, we are not persuaded of Examiner error in the rejection of claim 1 under 35 U.S.C. § 101. Thus, we sustain the Examiner’s rejection under § 101 of independent claim 1, independent claim 21, and dependent claims 2–11 and 22–30, which were not separately argued with specificity.

CONCLUSION

Appellants have not shown that the Examiner erred in rejecting claims 1–11 and 21–30 under 35 U.S.C. § 101.

DECISION

We affirm the Examiner’s rejection of claims 1–11 and 21–30.

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