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UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

Ex parte EVANS MEHEW, KIMBERLY DUNWOODY,
and GAIL GALUPPO¹

Appeal 2017-007415
Application 12/894,456
Technology Center 3600

Before: ELENI MANTIS MERCADER, JAMES R. HUGHES, and
CATHERINE SHIANG, *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 1–22, which constitute all the claims pending in this application. *See* Final Act. 1–2; Appeal Br. 1.² We have jurisdiction under 35 U.S.C. § 6(b). We Affirm.

¹ According to Appellants, the real party in interest is the Western Union Company. Appeal Br. 3.

² We refer to Appellants' Specification filed Sept. 30, 2010 ("Spec."); Appeal Brief filed Feb. 16, 2016 ("Appeal Br.") Supplemental Appeal Brief filed June 16, 2016 ("Supp. Appeal Br."); and Reply Brief filed Apr. 10, 2017 ("Reply Br."). We also refer to the Examiner's Final Office Action

Appellants' Invention

The invention “relates generally to financial transfers” (Spec. ¶ 2). More specifically Appellants’ invention relates to systems and methods for improving the security of financial transactions conducted using a mobile (user) device. *See* Spec. ¶ 4. The process (method) for providing improved security of a financial transaction conducted at a user device collects unique device identifying data from the user device, including data relating to features of the user device and data relating to use of the user device. The method transmits the unique device identifying data to a host computer and stores the data as a reference unique device identifier. When a user conducts a financial transaction on the user device, the process transmits current unique device identifying data collected at the user device (when the financial transaction is initiated) to the host computer and compares the current unique device identifying data to the unique device identifier. Based on the comparison, the process determines, at the host computer, whether to authorize the financial transaction. *See* Spec. ¶¶ 5–6; Abstract.

Representative Claim

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

1. A method for providing security to a financial transaction conducted at a user device, comprising:

initially collecting unique device identifying data from the user device, the unique device identifying data including both data relating to features of the user device and data relating to use of the user device;

mailed Aug. 14, 2015 (“Final Act.”), and Answer mailed Feb. 9, 2017 (“Ans.”).

transmitting the initially collected unique device identifying data to a host computer, and storing the initially collected unique device identifying data at the host computer as a reference unique device identifier;

when a financial transaction is to be conducted at the user device, transmitting current unique device identifying data collected at the user device to the host computer, the current unique device identifying data corresponding to the unique device identifying data initially collected at the user device;

comparing the current unique device identifying data to the unique device identifier at the host; and

based on the comparison, determining, at the host computer, whether to authorize the financial transaction.

App. Br. 16 (Claims Appendix).

*Rejection on Appeal*³

The Examiner rejects claims 1–22 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

Appellants argue independent claims 1, 14, and 15 (as well as dependent claims 2–13 and 16–22) together as a group with respect to the

³ The Examiner withdrew the rejections under 35 U.S.C. §§ 102(b) and 103(a). *See* Ans. 6. Accordingly, we do not address Appellants' discussion of the withdrawn rejections. *See* Appeal Br. 8–16.

§ 101 rejection. *See* Appeal Br. 5–13. We select independent claim 1 as representative of Appellants’ arguments with respect to claims 1–22. 37 C.F.R. § 41.37(c)(1)(iv).

The Examiner rejects the claims (claim 1) as being directed to patent-ineligible subject matter in that claim 1 is “directed to the abstract idea of a fundamental economic practice (i.e. determining whether to authorize a financial transaction) and/or a method of organizing human activity (i.e. identifying a device to authorize a financial transaction).” Final Act. 7; *see* Ans. 6–10. Additionally, the Examiner found the

additional elements or combination of elements in the claims . . . amount[] to no more than: (i) mere instructions to implement the idea on a computer, and/or (ii) recitation of generic computer structure that serves to perform generic computer functions that are well-understood, routine, and conventional activities previously known to the pertinent industry.

Final Act. 7–8; *see* Ans. 6–10.

Appellants summarize the *Alice* decision (*Alice Corp. Pty. Ltd. v. CLS Bank Int’l*, 134 S.Ct. 2347 (2014)) and the USPTO’s guidance concerning patent-eligible subject matter (*see* Appeal Br. 5–8) and contend the claims are not directed to the abstract idea proposed by the Examiner because “the claims recite far more than identifying a device to authorize a financial transaction” (Appeal Br. 9; *see* Appeal Br. 8–9). Appellants also contend “Appellants’ claims pose no risk of pre-emption of any fundamental business practice or abstract idea, and are therefore patent-eligible” (Appeal Br. 9; *see* Appeal Br. 9–10) and “the claims contain additional details sufficient to ensure that the patent in practice amounts to significantly more than a patent upon the [abstract idea] itself” (Appeal Br. 10 (quotations omitted); *see* Appeal Br. 10–11). Appellants further contend a number of

recent Federal Circuit case, in particular *DDR Holdings—DDR Holdings, LLC v. Hotels.com L.P.*, 773 F.3d 1245 (Fed. Cir. 2014)—support their contentions that the instant claims are not directed to patent-ineligible subject matter. *See* Appeal Br. 11–13.

In Appellants’ Reply Brief, Appellants present more detailed contentions with respect to the Examiner’s *Alice* analysis. Appellants contend “the claims improve a computer-related technology, as evidenced from the support in the specification, the claims are not directed to an abstract idea” (Reply Br. 6) and recite a “particular solution to a problem or a particular way to achieve a desired outcome” (Reply Br. 6 (quotations omitted)) similar to the claims in *McRO (McRO, Inc. v. Bandai Namco Games Am. Inc.*, 837 F.3d 1299 (Fed. Cir. 2016)). *See* Reply Br. 2–7. Appellants also reiterate that the claims do not preempt other approaches for performing the allegedly abstract idea, similar to the claims in *McRO*. *See* Reply Br. 7–8. Appellants further contend that the “alleged abstract ideas of ‘authorize a financial transaction’ or ‘identifying a device to authorize a financial transaction’ are not abstract ideas in the form of a fundamental economic activity or a method of organizing human activity.” Reply Br. 8; *see* Reply Br. 8–10. Appellants additionally contend that “the claims recite elements that are significantly more than the alleged abstract idea.” Reply Br. 11; *see* Reply Br. 10–12.

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.*

Ltd. v. CLS Bank Int'l, 134 S.Ct. 2347, 2354 (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*, 134 S.Ct. at 2355. 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,” e.g., to an abstract idea. *Id.* For example, abstract ideas include, but are not limited to, fundamental economic practices, methods of organizing human activities, an idea of itself, and mathematical formulas or relationships. *Id.* at 2355–57. If the claims are not directed to an abstract idea, the inquiry ends. Otherwise, the inquiry proceeds to the second step 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*, 134 S.Ct. at 2355 (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 2355 (alteration in original) (quoting *Mayo*, 566 U.S. at 72–73).

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).

Alice Step 1 Analysis

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*, 837 F.3d at 1312 (quoting *O’Reilly v. Morse*, 56 U.S. (15 How.) 62, 113 (1853)). “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.” *McRO*, 837 F.3d at 1314.

We begin our analysis with a detailed interpretation of claim 1. Claim 1 recites a process (method) for providing security for a financial transaction conducted at a user device by collecting data (“unique device identifying data from the user device,” which includes “data relating to features of the user device and data relating to use of the user device”). The collected data is transmitted from the user device to a host computer and stored on the host computer “as a reference unique device identifier.” Subsequently, when a user conducts a financial transaction on the user device, user device data (which corresponds to the unique device identifying data initially collected

at the user device) is collected and transmitted to the host computer—
“transmitting current unique device identifying data collected at the user
device to the host computer.” The host computer compares the current data
(current unique device identifying data) to the previously stored data (unique
device identifier) and determines whether to authorize the financial
transaction. In sum, claim 1 is directed to collecting, organizing, storing,
and analyzing (comparing) data to determine whether to authorize a
financial transaction.

Our interpretation concurs with the Examiner’s, i.e., that the claim is
directed to “the abstract idea of a fundamental economic practice (i.e.
determining whether to authorize a financial transaction) and/or a method of
organizing human activity (i.e. identifying a device to authorize a financial
transaction).” Final Act. 7.

Appellants contend claim 1 is not directed to a fundamental economic
activity or a method of organizing human activity (*see* Reply Br. 8–10) in
that the claim improves a computer-related technology and recites a
particular solution to a problem similar to the claims in *McRO* (*see* Reply
Br. 2–7).

Appellants misconstrue the relevant law and precedent. The *McRO*
decision distinguished the at-issue claims from previous human-
implemented methods for performing animation. *See McRO*, 837 F.3d at
1314. Claim 1, unlike the claims in *McRO*, does not recite rules specifically
defining a computerized process that is different in kind from the previous
processes a human would use to collect and analyze information to
determine whether to allow a financial transaction. That is, there is no
aspect of claim 1 that defines a technological improvement, whether in a

software algorithm or a hardware design. *See McRO*, 837 F.3d at 1314; *Enfish*, 822 F.3d at 1335–36.

Further, with respect to step 1 of the *Alice/Mayo* analysis, instead of using a fixed definition of an abstract idea and analyzing how claims fit (or do not fit) within the definition, “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.” *Amdocs (Isr.) Ltd. v. Openet Telecom, Inc.*, 841 F.3d 1288, 1294 (Fed. Cir. 2016) (citing *Elec. Power Grp., LLC v. Alstom S.A.*, 830 F.3d 1350, 1353–54 (Fed. Cir. 2016)). As part of this inquiry, we must “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).

Here, Appellants’ claims generally, and independent claim 1 in particular, relate to collecting, organizing, and analyzing information to determine whether to authorize a financial transaction (*see discussion supra*). That is, Appellants’ claims relate to collecting, organizing, and analyzing data utilizing un-recited processes or algorithms and devices to make the determination (whether to authorize the transaction). *See* Abstract; Spec. ¶¶ 5–6. This is consistent with how Appellants describe the claimed invention. *See* Appeal Br. 3 and Supp. Appeal Br. 2 citing Spec. ¶¶ 6, 17, 30, 56.

The present claims are analogous to a number of cases in which courts have identified similar claims as encompassing abstract ideas. Our reviewing court has held that abstract ideas include gathering, organizing,

analyzing, and manipulating information. *Elec. Power Grp.*, 830 F.3d at 1353–54 (finding claims directed to a “combination of . . . abstract-idea processes . . . of gathering and analyzing information” to be abstract). Similarly, our reviewing court has held that abstract ideas include gathering, organizing, analyzing, and storing information. See *Two-Way Media Ltd. v. Comcast Cable Commc’ns, LLC.*, 874 F.3d 1329, 1337–38 (Fed. Cir. 2017) (finding claims directed to the functional results of accumulating, converting, and monitoring records manipulate data “but fail[] to do so in a non-abstract way”); *Content Extraction & Transmission LLC v. Wells Fargo Bank, Nat’l Ass’n*, 776 F.3d 1343, 1345, 1347 (Fed. Cir. 2014) (finding the “claims generally recite . . . extracting data [and] recognizing specific information from the extracted data” and that the “claims are drawn to the basic concept of data recognition”).

Here, the collection, organization, analysis, and manipulation of information (data)—to determine whether to authorize a financial transaction—are analogous to the abstract ideas of collecting, analyzing, and manipulating information discussed in *Electric Power Group*, *Two-Way Media*, and *Content Extraction*.

Appellants’ claims can also be distinguished from patent-eligible claims such as those in *McRO*, *Bascom* (*Bascom Global Internet Servs., Inc. v. AT&T Mobility LLC*, 827 F.3d 1341 (Fed. Cir. 2016)), and *Enfish* that are directed to “a specific means or method that improves the relevant technology” (*McRO*, 837 F.3d at 1314) or a “specific technical solution” (*Bascom*, 827 F.3d at 1351–52) or “a specific improvement to the way computers operate” (*Enfish*, 822 F.3d at 1336). Appellants’ claims are directed to the results of data analysis rather than a particular way of

performing or inventive technology for performing a data comparison to determine whether to authorize a financial transaction or, in other words, “achiev[ing] these results in a non-abstract way.” *Two-Way Media*, 874 F.3d at 1337–38 (quotations omitted). 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.*, 830 F.3d at 1354. Thus, we agree with the Examiner that the claims are directed to the abstract ideas of determining whether to authorizing a financial transaction which is, alternately and collectively, a fundamental economic practice, a method of organizing human activity, and collecting, organizing, and analyzing information.

Appellants also contend that the claims do not preempt the Examiner’s asserted abstract idea (*supra*). See Appeal Br. 9–10; Reply Br. 7–8. We find Appellants’ arguments unavailing of Examiner error. Although preemption is the concern that drives the exclusionary principle of judicial exceptions to patent-eligible subject matter (*see Alice*, 134 S. Ct. at 2354), preemption is not a separate test of patent-eligibility, but is inherently addressed within the *Alice* framework. See *Ariosa Diagnostics, Inc., v. Sequenom, Inc.*, 788 F.3d 1371, 1379 (Fed. Cir. 2015) (“While preemption may signal patent ineligible subject matter, the absence of complete preemption does not demonstrate patent eligibility.”).

Alice Step 2 Analysis

Having found 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*, 134 S.Ct. at 2355). 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*, 134 S.Ct. at 2359). 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*, 827 F.3d at 1349 (citation omitted).

Here, the Examiner determined that Appellants’ claims do not add significantly more. *See* Final Act. 7–8; Ans. 6–10. Appellants, on the other hand, contend “the claims recite elements that are significantly more than the alleged abstract idea.” Reply Br. 11; *see* Appeal Br. 10–11; Reply Br. 10–12.

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. We agree with the Examiner that collecting, organizing, and analyzing information, utilizing undisclosed means (algorithms, processes, and/or devices) and utilizing a generic computer system and processor to make a determination (determine whether to authorize a financial transaction) does not amount to significantly more than the abstract idea (of determining whether to authorize a financial transaction). *See* Final Act. 7–8; Ans. 6–10. As pointed out by the Examiner, Appellants’ Specification describes general purpose computers performing routine and conventional

processes/functionality. *See* Ans. 6–7 (citing Spec. ¶¶ 24, 35). For example, the Specification describes “mobile devices” including “any one or more of various kinds of devices for communicating with network” “such as a cellular phone, a personal communication device, or a notebook, notepad or laptop computer” (Spec. ¶ 24), “central processing units” and “storage devices” (Spec. ¶ 35) utilized to implement the recited processes—“mobile device . . . executes the fingerprint application to initiate the collection or capture of device fingerprint data at the mobile device” (Spec. ¶ 41); “authentication is controlled at a mobile wallet application running at a host computer system” and the “fingerprint data is stored at the mobile device and also communicated to a digital or mobile wallet (implemented at the wallet application at the host)” (Spec. ¶ 17); if “a fingerprint is authenticated for a mobile device, the wallet application . . . determines . . . the transaction is authorized” (Spec. ¶ 56).

Appellants simply reiterate the limitations of claim 1 and conclude that the limitations are not routine or conventional. *See* Appeal Br. 10–11; Reply Br. 10–12. Appellants, however, do not explain in sufficient detail or provide persuasive evidence showing how the limitations (individually and in combination) are not routine or are unconventional or “result in [a] non-conventional and non-generic arrangement of elements” (Reply Br. 12). As we explain *supra*, we agree with the Examiner that Appellants’ claim limitations do not amount to significantly more than the abstract idea of collecting, organizing, and analyzing information to determine whether to authorize a financial transaction by performance of well-understood, routine, and conventional activities.

With respect to Appellants' arguments concerning *DDR Holdings*, in that the instant claims allegedly improve the operation of a computer system, we disagree. *See* Appeal Br. 11–13. In *DDR Holdings*, the court held that a claim may amount to more than an abstract idea recited in the claims when it addresses and solves problems *only* encountered with computer technology and online transactions, e.g., by providing (serving) a composite web page rather than adhering to the routine, conventional functioning of Internet hyperlink protocol. *See DDR Holdings*, 773 F.3d at 1257–59. In contrast and as discussed *supra*, claim 1 simply collects, organizes, and analyzes data to make a determination (determine whether to authorize a financial transaction) using known conventional computers and/or equipment. *See supra*. Despite Appellants' arguments to the contrary, nothing in claim 1 recites a specific improvement to the way computers operate. The collection, organization, and analysis of information (to make a determination whether to authorize/allow a financial transaction) is not a solution to a technical problem as discussed in *DDR Holdings*.

Rather, making a determination to allow a transaction based on analyzed information (a comparison), is a commercial solution to a routine and conventional activity involving financial transactions—making a determination whether to allow a transaction is fundamental to the transaction process—it is not a technical solution to a computer or networking problem. This commercial solution may be assisted using a general purpose computer (*see* Spec. ¶¶ 24, 35) to perform the data collection, transmission, storage, and analysis processes, and determine whether to authorize a transaction. The commercial solution does not, however, improve how the computers themselves function. As we

previously explained, the instant claims are more akin to the claims for analyzing information found to be abstract. *See Elec. Power Grp.*, 830 F.3d at 1353.

We agree with the Examiner that the additional limitations, separately, or as an ordered combination, do not provide meaningful limitations (i.e., do not add significantly more) to transform the abstract idea into a patent eligible application. *See, e.g.,* Ans. 6–10. The claim merely recites functions (processes) for collecting and analyzing data using known conventional computers and/or equipment to communicate/transmit data and make a determination. Such conventional computer and communication processes “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 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, as well as independent claims 14 and 15, and dependent claims 2–13 and 16–22, which were not argued separately.

CONCLUSION

Appellants have not shown that the Examiner erred in rejecting claims 1–22 under 35 U.S.C. § 101.

DECISION

We affirm the Examiner’s rejection of claims 1–22.

Appeal 2017-007415
Application 12/894,456

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