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EXAMINER

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UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

Ex parte ALEXANDER WILLIAM EVANS

Appeal 2016-006576
Application 14/082,331
Technology Center 3600

Before HUBERT C. LORIN, JOSEPH A. FISCHETTI, and
AMEE A. SHAH, *Administrative Patent Judges*.

SHAH, *Administrative Patent Judge*.

DECISION ON APPEAL¹

The Appellant² appeals under 35 U.S.C. § 134(a) from the Examiner’s final decision rejecting claims 100–109, 111–127, and 129–141, which are all of the pending claims, under 35 U.S.C. § 101 as being directed to non-statutory subject matter. We have jurisdiction under 35 U.S.C. § 6(b).

We AFFIRM.

¹ Throughout this decision, we refer to the Appellant’s Appeal Brief (“Appeal Br.,” filed Nov. 9, 2015), Reply Brief (“Reply Br.,” filed June 17, 2016), and Specification (“Spec.,” filed Nov. 18, 2013), and to the Examiner’s Answer (“Ans.,” mailed Apr. 19, 2016), and Final Office Action (“Final Act.,” mailed June 11, 2015).

² According to the Appellant, the real party in interest is St. Isidore Research, LLC. Appeal Br. 2.

STATEMENT OF THE CASE

The Appellant's invention "relates to fraud prevention and fraud 'early warning' notifications for transactions, in particular remote and/or electronic transactions such as 'e-commerce' and 'm-commerce' transactions." Spec. ¶ 2.

Claims 100 and 118 are the independent claims on appeal. Claim 100 (Appeal Br. 17 (Claims App.)) is exemplary of the subject matter on appeal and is reproduced below.

100. A method for authenticating a device to be associated with an account, the method comprising:

receiving at a server, over a first network, a communication from a first device associated with an account, wherein the communication comprises an account access request related to a second device not associated with the account;

determining by an automated data processor at least one contact device associated with the account and accessible over an associated network;

extracting from a database, by the automated data processor, information associated with each of the at least one contact device;

transmitting to each of the at least one contact device over its associated network using the information associated with each said contact device, a verification message associated with the account access request;

receiving, over a second network that may be the same as the first network, a response related to the verification message;

verifying, using a processor, the authenticity of the account access request based on the response; and

authenticating the second device, such that one or more subsequent requests to access the account from the second device are granted without communicating with the first device.

ANALYSIS

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, 588–89 (2013)).

The Supreme Court in *Alice* reiterated the two-step framework, set forth previously in *Mayo Collaborative Services v. Prometheus Laboratories, Inc.*, 566 U.S. 66, 78–79 (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. The first step in that analysis is to “determine whether the claims at issue are *directed to* one of those patent-ineligible concepts.” *Id.* (emphasis added) (citing *Mayo*, 566 U.S. at 79). If so, the second step is to consider the elements of the claims “individually and ‘as an ordered combination’” to determine whether the additional elements “‘transform the nature of the claim’ into a patent-eligible application.” *Id.* (quoting *Mayo*, 566 U.S. at 78–79).

In other words, the second step is to “search for an ‘inventive concept’—*i.e.*, an element or combination of elements that is ‘sufficient to ensure that the patent in practice amounts to significantly more than a patent upon the [ineligible concept] itself.’” *Id.* (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, i.e., “whether the focus of the claims is on [a] 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.” *See Enfish, LLC v. Microsoft Corp.*, 822 F.3d 1327, 1335–36 (Fed. Cir. 2016).

Under the first step of the *Alice* framework, the Examiner determines that independent claims 100 and 118 are directed to the abstract idea of “authenticating a device by transmitting verification messages.” Ans. 6; *see also* Final Act. 2, 4. The Appellant argues that “[t]his is an impermissibly broad characterization that ignores not only the detailed elements of the independent claims, but also the dependent claims” (Reply Br. 3), but does not state what the Appellant considers the claims to be directed to.

Before determining whether the claims at issue are directed to an abstract idea, we must first determine what the claims are directed to.

The “directed to” inquiry . . . cannot simply ask whether the claims *involve* a patent-ineligible concept, because essentially every routinely patent-eligible claim involving physical products and actions *involves* a law of nature and/or natural phenomenon—after all, they take place in the physical world. *See Mayo*, [566 U. S. at 69] 132 S. Ct. at 1293 (“For all inventions at some level embody, use, reflect, rest upon, or apply laws of nature, natural phenomena, or abstract ideas.”) Rather, the “directed to” inquiry applies a stage-one filter to claims, considered in light of the specification, based on

whether “their character as a whole is directed to excluded subject matter.” *Internet Patents Corp. v. Active Network, Inc.*, 790 F.3d 1343, 1346 (Fed. Cir. 2015); *see Genetic Techs. Ltd. v. Meril L.L.C.*, 818 F.3d 1369, 1375 (Fed. Cir. 2016) (inquiring into “the focus of the claimed advance over the prior art”).

Enfish, 822 F.3d at 1335.

The step-one analysis requires us to consider the claims “in their entirety to ascertain whether their character as a whole is directed to excluded subject matter.” *Internet Patents Corp.*, 790 F.3d at 1346. The question is whether the claims as a whole “focus on a specific means or method that improves the relevant technology” or are “directed to a result or effect that itself is the abstract idea and merely invoke generic processes and machinery.” *McRO, Inc. v. Bandai Namco Games Am. Inc.*, 837 F.3d 1299, 1314 (Fed. Cir. 2016).

Independent claim 100 provides for “[a] method for authenticating a device to be associated with an account” comprising the steps of receiving at a server request data to authenticate a second device, determining by a processor a contact device, extracting data from a database associated with the contact device, transmitting to the contact device verification data, receiving responsive data, verifying using a processor the request based on the received data, and authenticating the second device. Appeal Br. 17. (Claims App.). There is no specific apparatus or technology recited to perform the steps. Independent claim 118 provides for a system comprising servers, processors, module, and database to perform the functions of claim 100. *Id.* at 19–20. The Specification provides for an invention “relat[ing] to fraud prevention” in transactions “wherein it is desirable to authenticate and verify” parties’ identities. Spec. ¶ 2. The Appellant points

to Figure 2 and paragraphs 51 and 98 as support for determining a contact device, Figure 18 and paragraph 54 for verifying the authenticity of the request, and Figure 18 and paragraphs 41 and 42 for authenticating the second device. Appeal Br. 3–4. The cited portions of the Specification do not provide details on how these steps are performed, but indicate that they can be performed by analyzing or comparing data. The dependent claims further define the step of receiving a response by providing from what device responsive data is received, when the response is received, and the type of data in the response, the step of verifying by matching data, the type of network used, the account, the step of transmitting verification data by defining timing, adding a step of notifying a party, and the type of device.

In that context, independent claims 100 and 118 (and the dependent claims) are directed to receiving, analyzing, verifying, and transmitting data to authenticate a device.³ The claims are similar to claims deemed abstract ideas by our reviewing court in *CyberSource Corp. v Retail Decisions, Inc.*, 654 F.3d 1366, 1370 (Fed. Cir. 2011) (“verifying the validity of credit card transactions over the Internet”), *FairWarning IP, LLC v. Iatric Systems, Inc.*, 839 F.3d 1089, 1093–94 (Fed. Cir. 2016) (“collecting and analyzing information to detect misuse and notifying a user when misuse is detected” in an abstract idea), *buySAFE, Inc. v. Google, Inc.*, 765 F.3d 1350, 1355 (Fed. Cir. 2014) (guaranteeing transactions), and *Electric Power Group, LLC v. Alstom S.A.*, 830 F.3d 1350, 1354 (Fed. Cir. 2016) (process of

³ We note that “[a]n abstract idea can generally be described at different levels of abstraction.” *Apple, Inc. v. Ameranth, Inc.*, 842 F.3d 1229, 1240 (Fed. Cir. 2016). The Board’s “slight revision of its abstract idea analysis does not impact the patentability analysis.” *Id.* at 1241.

gathering and analyzing information of a specified content and displaying the result). Here, the claims involve nothing more than receiving, determining, analyzing, and sending data to authenticate a device without any particular inventive technology — an abstract idea. *See Electric Power*, 830 F.3d at 1354. As such, we find unpersuasive the Appellant’s argument that “The Claims Are Not Directed to Ideas Identified by Courts as Abstract.” Appeal Br. 6 (emphasis omitted).

We also find unpersuasive the Appellant’s arguments that the claims are not directed to an unpatentable abstract idea because they are analogous to those of *DDR Holdings, LLC v. Hotels.com, L.P.*, 773 F.3d 1245 (Fed. Cir. 2014), in that they “address a modern technological challenge (preventing fraud in digital transactions) that is particular to a specific processing technology” (Appeal Br. 6–7), address problems that arise in the use of networked computers (*id.* at 7), and the “claim[ed] solution is ‘necessarily rooted in computer technology in order to overcome a problem specifically arising in the realm of computer networks,’” i.e., “the problem created of how to authenticate remote parties to a transaction with a near-zero delay” (*id.* at 14–15) (emphasis omitted) (citing Spec. pp. 1–11).

In *DDR Holdings*, the Federal Circuit determined that the claims addressed the problem of retaining website visitors who, if adhering to the routine, conventional functioning of Internet hyperlink protocol, would be transported instantly away from a host’s website after clicking on an advertisement and activating a hyperlink. *DDR Holdings*, 773 F.3d at 1257. The Federal Circuit, thus, held that the claims were directed to statutory subject matter because they claim a solution “necessarily rooted in computer technology in order to overcome a problem specifically arising in the realm

of computer networks.” *Id.* The court cautioned that “not all claims purporting to address Internet-centric challenges are eligible for patent.” *Id.* at 1258. And the court contrasted the claims to those at issue in *Ultramercial, Inc. v. Hulu, LLC*, 772 F.3d 709 (Fed. Cir. 2014), in that, in *DDR Holdings*, the computer network was not operating in its “normal, expected manner” and the claims did not “recite an invention that is . . . merely the routine or conventional use of the Internet.” *Id.* at 1258–59.

In contrast, here, according to the Appellant, the claims address the problems of “preventing fraud in digital transactions” (Appeal Br. 7) and “authentica[t] remote parties to a transaction with a near-zero delay (*id.* at 14) (emphasis omitted). Although the transactions are network-centric and the parties remote, preventing fraud in and quickly authenticating transactions, even remote ones (e.g., over the telephone), are not problems rooted in technology arising out of computer networks, but rather business problems that existed prior to the Internet and computers.

Also, unlike *DDR Holdings*, here, the solution comprises components of generic servers, processors, module, and database operating in their normal capacities to receive, determine, analyze (verify) and store data. *See* Spec. ¶¶ 76–81, Fig. 1. The Appellant does not direct attention to, and we do not see, where the Specification provides that the components act in an abnormal manner. Rather, the claims “recite an invention that is . . . merely the routine or conventional use of the Internet.” *DDR Holdings*, 773 F.3d at 1258–59.

We further find unpersuasive of Examiner error the Appellant’s argument that “the Office failed to conduct a proper 35 U.S.C. § 101 analysis.” Appeal Br. 7; *see also* Reply Br. 2–3. Here, in rejecting the

pending claims under § 101, the Examiner analyzes the claims using the *Mayo/Alice* two-step framework. Specifically, the Examiner looks to the language of the claims and determines that the claims are directed to the abstract idea of “authenticating a device by transmitting verification messages.” Ans. 6. The Examiner cites to and compares the idea to judicial decisions. *See id.* at 6, 9–11. The Examiner further determines that the additional elements of the claims, taken alone and as an ordered combination, do not ensure that the claims amount to significantly more than the abstract idea. *Id.* at 6–7; *see also* Final Act. 4–5. The Examiner, thus, has clearly followed Office guidelines.⁴ And, the Examiner has clearly articulated the reasons for the rejection and has notified Appellant of the reasons for the rejection “together with such information and references as may be useful in judging of the propriety of continuing the prosecution of [the] application.” 35 U.S.C. § 132. We find that, in doing so, the Examiner set forth a prima facie case of unpatentability. *See In re Jung*, 637 F.3d 1356, 1362 (Fed. Cir. 2011); *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.”)

Further, as to Appellant’s argument regarding “***substantial, concrete evidence***” to “show[] that the recited method is old and well-known” (Appeal Br. 9), we note that the Examiner cites to the intrinsic evidence of the claim language as evidence in determining that the claims are directed to

⁴ We further note that the MPEP and guidelines are not legal requirements. *Cf. In re Fisher*, 421 F.3d 1365, 1372 (Fed. Cir. 2005) (“The MPEP and Guidelines ‘are not binding on this court’”).

an abstract idea. *See* Final Act. 4. Although the Supreme Court provided references in its analysis in *Alice* (*see* Appeal Br. 9), evidence may be helpful in certain situations where, for instance, facts are in dispute. But it is not always necessary, and is not necessary here. *See Mortgage Grader, Inc. v. First Choice Loan Servs. Inc.*, 811 F.3d 1314, 1325 (Fed. Cir. 2016) (“[I]t is also possible, as numerous cases have recognized, that a § 101 analysis may sometimes be undertaken without resolving fact issues.”).

Whether “the recited method is old and well-known” is not part of the 35 U.S.C. § 101 analysis. That “the lack of any prior art rejections under 35 U.S.C. §102 or §103 indicates that the Office recognizes that the claims are novel and non-obvious” (Appeal Br. 9; *see also* Reply Br. 4), does not automatically indicate patent-eligible subject matter under 35 U.S.C. § 101. An abstract idea does not transform into an inventive concept just because the prior art does not disclose or suggest it. *See Mayo*, 566 U.S. at 90. “Groundbreaking, innovative, or even brilliant discovery does not by itself satisfy the § 101 inquiry.” *Ass’n for Molecular Pathology*, 133 S. Ct. at 2117. Indeed, “[t]he ‘novelty’ of any element or steps in a process, or even of the process itself, is of no relevance in determining whether the subject matter of a claim falls within the § 101 categories of possibly patentable subject matter.” *Diamond v. Diehr*, 450 U.S. 175, 188–89 (1981); *see also Mayo*, 566 U.S. at 90 (rejecting “the Government’s invitation to substitute §§ 102, 103, and 112 inquiries for the better established inquiry under § 101”).

In response to the Appellant’s argument that “the pending claims would ‘pose no comparable risk of pre-emption’” because they “do not broadly and generically claim all forms of device” (Appeal Br. 10–11), we

note that although the Supreme Court has described “the concern that drives this exclusionary principle [i.e., the exclusion of abstract ideas from patent eligible subject matter] as one of preemption” (*see Alice*, 134 S. Ct. at 2354), characterizing preemption as a driving concern for patent eligibility is not the same as characterizing preemption as the sole test for patent eligibility. “The Supreme Court has made clear that the principle of preemption is the basis for the judicial exceptions to patentability” and “[f]or this reason, questions on preemption are inherent in and resolved by the § 101 analysis.” *Ariosa Diagnostics, Inc. v. Sequenom, Inc.*, 788 F.3d 1371, 1379 (Fed. Cir. 2015) (citing *Alice*, 134 S. Ct. at 2354). Although “preemption may signal patent ineligible subject matter, the absence of complete preemption does not demonstrate patent eligibility.” *Id.* The aforementioned concept is not sufficiently limiting so as to fall clearly on the side of patent-eligibility.

Under the second step of the *Mayo/Alice* framework, we agree with and find supported the Examiner’s determination that the elements of independent claims 100 and 118, and their dependent claims, individually or as an ordered combination, do not amount to significantly more than that abstract idea. *See* Final Act. 4–5; Ans. 7–8. We are not persuaded of Examiner error by the Appellant’s arguments that assert the opposite. *See* Appeal Br. 11–14.

The Appellant recites the limitations of claims 100 and 118⁵ and state that they “are significantly more than the alleged abstract idea.” Appeal Br. 11–14. However, the Appellant does not provide further support or reasoning as to why or how the limitations of receiving, determining,

⁵ The Appellant’s reference to “claim 17” (Appeal Br. 12) is considered a typographical error and that the Appellant actually refers to claim 118.

extracting, transmitting, and verifying data and authenticating a device are not well-understood, routine, and conventional functions of a generic computer. *Cf.* Reply Br. 5 (“The mere fact that they might be implemented using on a computer using ‘generic functions’ (Answer at p. 5 and p. 8) is irrelevant.”). The Specification provides that the method is performed by a system comprising generic servers, devices, processor, network, module, and database. *See* Spec. ¶¶ 76–81. There is no indication in the Specification that any technologically novel or inventive hardware is required to perform the method. *See Affinity Labs of Texas, LLC v. DIRECTV, LLC*, 838 F.3d 1253, 1263 (Fed. Cir. 2016); *see also Enfish*, 822 F.3d. at 1336 (focusing on whether the claim is “an improvement to [the] computer functionality itself, not on economic or other tasks for which a computer is used in its ordinary capacity”). As noted above, the Specification does not provide details for the specific authentication step, but indicates it can be performed by analyzing or comparing recorded/stored data. *See* Spec. ¶¶ 41–42.

To the extent the Appellant argues that the claims are significantly more than the abstract idea because of the detailed, numerous steps required (*see* Appeal Br. 11–14; Reply Br. 4–5), we disagree. “None of these [seven] individual steps, viewed ‘both individually and ‘as an ordered combination,’ transform the nature of the claim into patent-eligible subject matter.” *Ultramercial*, 772 F.3d at 715. Having routine steps of receiving, determining, extracting, transmitting, and verifying data and authenticating a device by analyzing data, and the use of a network, “do not transform an otherwise abstract idea into patent-eligible subject matter.” *Id.* at 716.

Thus, we sustain the Examiner’s rejection of claims 100–109, 111–127, and 129–141 under 35 U.S.C. § 101.

Appeal 2016-006576
Application 14/082,331

DECISION

The Examiner's rejection of claims 100–109, 111–127, and 129–141 under 35 U.S.C. § 101 is AFFIRMED.

No time period for taking any subsequent action in connection with this appeal may be extended under 37 C.F.R. § 1.136(a)(1)(iv).

AFFIRMED