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EXAMINER
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BEDNASH, JOSEPH A

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UNITED STATES PATENT AND TRADEMARK OFFICE

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BEFORE THE PATENT TRIAL AND APPEAL BOARD

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*Ex parte* CORNELIA KAPPLER, CORNEL PAMPU, and  
LAURENSIUS TIONARDI

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Appeal 2018-001803  
Application 12/738,138  
Technology Center 2400

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Before JOHN A. EVANS, BETH Z. SHAW, and  
CARL L. SILVERMAN, *Administrative Patent Judges*.

SHAW, *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 Final Office Action rejecting claims 1–19, all of which are pending on appeal. We have jurisdiction under 35 U.S.C. § 6(b).

We AFFIRM.<sup>1</sup>

## RELATED APPEALS

The Board issued a prior decision for this application related to a prior appeal on March 23, 2016 (Appeal No. 2014-007804), in which we affirmed the Examiner's decision.

## ILLUSTRATIVE CLAIM

Claim 1 is illustrative of Appellants' invention, as reproduced below:

1. A device, comprising:
  - at least one processor; and
  - at least one memory including computer program code, wherein the at least one memory and the computer program are configured to, with the at least one processor, cause the device to negotiate a roaming agreement between an originating network and a destination network;
    - generate rules according to a negotiated roaming agreement negotiated by the device, wherein the rules are configured to determine configuration settings, wherein the rules comprise at least one of a rule for testing the roaming agreement, a rule for billing according to the roaming agreement, or a rule for monitoring faults according to the roaming agreement; and
    - implement configuration settings according to respective rules generated by the device.

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<sup>1</sup> Our Decision refers to the Appeal Brief filed August 28, 2018 ("App. Br."); Reply Brief filed December 8, 2017 ("Reply. Br."); Examiner's Answer mailed October 30, 2017 ("Ans."); and Final Office Action mailed December 15, 2015 ("Final Act").

*Examiner's Rejection*

Claims 1–19 stand rejected under 35 U.S.C. § 101 because the claimed invention is directed to inelligible subject matter. Final Act. 2–7.

Claims 1–10 and 19 stand rejected under 35 U.S.C. § 112, first paragraph, as failing to comply with the written description requirement. Final Act. 7–9.

Claims 1–10 stand rejected under 35 U.S.C. § 112, second paragraph, as being indefinite. Final Act. 9–11.

Claims 1–5, 11–15, and 19 stand rejected under 35 U.S.C. § 102(b) as being anticipated by Alfano (US 7,436,766 B2, issued Oct. 14, 2008). Final Act. 12–19

Claims 6–9, 16, and 18 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Alfano and Ekeroth (NPL, Ericsson Review No. 3, 2000). Final Act. 19–22.

Claims 10 and 17 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Alfano, Ekeroth, and Bos (US 7,027,818 B2, issued Apr. 11, 2006). Final Act. 22–23.

ANALYSIS

*Section 101 Rejection*

The Examiner finds claims 1–19 are directed to ideas that have been identified as abstract by our reviewing court. Final Act. 2–7; Ans. 2–5. In particular, the Examiner finds that the abstract idea underlying these claims is creating a contractual relationship. Ans. 3. The Examiner also finds additional elements recited in the claims do not amount to significantly more

than the abstract idea itself. *Id.* at 4. According to the Examiner, the claims require no more than performing generic computer functions. *Id.*

With respect to the Examiner’s rejections of claims 1–19 under 35 U.S.C. § 101, Appellants do provide substantive arguments for separate patentability for any particular claims. App. Br. 9–10; Reply Br. 2–8. Accordingly, we will decide the appeal of the § 101 rejection for claims 1–19 on the basis of claim 1 alone. *See* 37 C.F.R. § 41.67(c)(1)(vii). Appellants contend the claims are not directed to an abstract idea because the claims recite more than just negotiating a roaming agreement. App. Br. 9. Appellants also contend the claims recite technological improvements. *Id.* at 9–10.

We do not find Appellants’ arguments persuasive. Instead, we find the Examiner has provided a comprehensive response to Appellants’ arguments supported by a preponderance of evidence. Ans. 2–5. As such, we adopt the Examiner’s findings and explanations provided therein. *Id.*

At the outset, we note the Supreme Court has long held that “[l]aws of nature, natural phenomena, and abstract ideas are not patentable.” *Alice Corp. Pty. Ltd. v. CLS Bank Intern.*, 134 S. Ct. 2347, 2354 (2014) (quoting *Assoc. for Molecular Pathology v. Myriad Genetics, Inc.*, 133 S. Ct. 2107, 2116 (2013)). “The ‘abstract ideas’ category embodies ‘the longstanding rule that ‘[a]n idea, by itself, is not patentable.’” *Id.* at 2355 (quoting *Gottschalk v. Benson*, 409 U.S. 63, 67 (1972)).

In *Alice*, the Supreme Court set forth an analytical “framework for distinguishing patents that claim laws of nature, natural phenomena, and abstract ideas from those that claim patent-eligible applications of those concepts.” *Id.* at 2355 (citing *Mayo Collaborative Servs. v. Prometheus*

*Labs., Inc.*, 566 U.S. 66 (2012)). The first step in the analysis is to “determine whether the claims at issue are directed to one of those patent-ineligible concepts,” such as an abstract idea. *Id.* (citing *Mayo*, 566 U.S. at 77–78).

If the claims are directed to a patent-ineligible concept, the second step in the analysis is to consider the elements of the claims “individually and ‘as an ordered combination’” to determine whether there are additional elements that “‘transform the nature of the claim’ into a patent-eligible application.” *Id.* (quoting *Mayo*, 566 U.S. at 79, 78). 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 prohibition against patenting an abstract idea “cannot be circumvented by attempting to limit the use of the formula to a particular technological environment’ or adding ‘insignificant postsolution activity.’” *Bilski v. Kappos*, 561 U.S. 593, 610–11 (2010) (citation omitted).

Turning to the first step of the *Alice* inquiry, we agree with the Examiner that Appellants’ claims are directed to an abstract idea of negotiating a roaming agreement. Ans. 2. All the steps recited in Appellants’ claims, including, for example: (i) “negotiate a roaming agreement,” (ii) “generate rules,” and (iii) “implement configuration settings,” are abstract processes of negotiating, generating, and configuring data.

Further, Supreme Court cases find an abstract idea in certain arrangements involving contractual relations. *Bilski* involved a method of

entering into contracts to hedge risk in commodity prices, and *Alice* involved methods and systems for “exchanging financial obligations between two parties using a third-party intermediary to mitigate settlement risk,” *Alice*, 134 S. Ct. at 2356. The Court in both cases relied on the fact that the contractual relations at issue constituted “a fundamental economic practice long prevalent in our system of commerce.” *Bilski*, 561 U.S. at 611; *see Alice*, 134 S. Ct. at 2356, 2357. In *buySAFE, Inc. v. Google, Inc.*, 765 F.3d 1350, 1355 (Fed. Cir. 2014), the Federal Circuit found “[t]he claims are squarely about creating a contractual relationship—a ‘transaction performance guaranty’—that is beyond question of ancient lineage.” The Examiner explains that in this case, the negotiation of a roaming agreement amounts to the creation of a contractual relationship between two service providers. Final Act. 3; Ans. 2. We agree with the Examiner. Similar to the claims in *buySAFE*, the claims here are about the negotiation of a roaming agreement, which amounts to the creation of a contractual relationship.

Turning to the second step of the *Alice* inquiry, we find nothing in Appellants’ claims that adds anything “significantly more” to transform them into a patent-eligible application of the abstract idea. *Alice*, 134 S. Ct. at 2357. The claimed steps are ordinary steps in data analysis and are recited in an ordinary order.

We are not persuaded by Appellants’ attorney argument that the claims recite more than just negotiating a roaming agreement and therefore improve the function of a computer. App. Br. 9–10; Reply Br. 4–6. Appellants do not persuade us *why* the claims or Specification provide “technological advantages and benefits” asserted by Appellants. *Id.* Rather, as the Examiner points out, the claims and Specification provide evidence

that the invention merely automates a known process. Ans. 3; *see* Spec. pp. 1–3, 10. Thus, contrary to Appellants’ assertions, the Specification does not describe the system as made up of special-purpose or specially configured computer components, but rather, as a general-purpose computer that includes generic components. *See* Spec. p. 12. As a result, nothing recited by the claims “offers a meaningful limitation beyond generally linking ‘the use of the [method] to a particular technological environment,’ that is, implementation via computers.” *Alice* 134 S. Ct. at 2360 (quoting *Bilski*, 561 U.S. at 610–11).

Limiting an abstract concept of a contractual relationship to a general purpose computer having generic components, such as the “processor” recited in claim 1, does not make the abstract concept patent-eligible under 35 U.S.C. § 101. As recognized by the Supreme Court, “the mere recitation of a generic computer cannot transform a patent ineligible abstract idea into a patent-eligible invention.” *Alice*, 134 S. Ct. at 2358; *see id.* at 2359 (concluding claims “simply instruct[ing] the practitioner to implement the abstract idea of intermediated settlement on a generic computer” are not patent eligible); *see also Ultramercial, Inc. v. Hulu, LLC*, 772 F.3d 709, 715–16 (Fed. Cir. 2014) (claims merely reciting abstract idea of using advertising as currency as applied to particular technological environment of the Internet are not patent eligible); *Accenture Global Servs., GmbH v. Guidewire Software, Inc.*, 728 F.3d 1336, 1344–45 (Fed. Cir. 2013) (claims reciting “generalized software components arranged to implement an abstract concept [of generating insurance-policy-related tasks based on rules to be completed upon the occurrence of an event] on a computer” are not patent eligible); *Dealertrack, Inc. v. Huber*, 674 F.3d 1315, 1333–34 (Fed.

Cir. 2012) (“[s]imply adding a ‘computer aided’ limitation to a claim covering an abstract concept, without more, is insufficient to render [a] claim patent eligible”); *Credit Acceptance Corp.*, 859 F.3d at 1056 (generic computer elements did not represent improvement in computer technology but rather were invoked merely as tools, and did not transform the claims into significantly more than claims to abstract idea itself); *Elec. Power Group LLC v. Alstom SA*, 830 F.3d 1350 (Fed. Cir. 2016) (rejection affirmed for a method of performing real-time performance monitoring of an electric power grid because “the claims do not go beyond requiring the collection, analysis, and display of available information in a particular field . . . over conventional computer and network technology”).

Moreover, the claims are neither rooted in computer technology as outlined in *DDR Holdings, LLC v. Hotels.com, L.P.*, 773 F.3d 1245 (Fed. Cir. 2014), nor do they seek to improve any type of *computer* capabilities, such as a “self-referential table for a computer database” outlined in *Enfish, LLC v. Microsoft Corp.*, 822 F.3d 1327, 1336 (Fed. Cir. 2016). The “processor” recited in Appellants’ claim 1 is not mentioned or described in the Specification. “[M]erely ‘configur[ing]’ [a] generic computer[] in order to ‘supplant and enhance’ an otherwise abstract manual process is precisely the sort of invention that the *Alice* Court deemed ineligible for patenting.” *Credit Acceptance Corp.*, 859 F.3d at 1056.

Because Appellants’ claims are directed to a patent-ineligible abstract concept and do not recite something “significantly more” under the second prong of the *Alice* analysis, we sustain the Examiner’s rejection of these claims under 35 U.S.C. § 101 as being directed to non-statutory subject matter in light of *Alice* and its progeny.

*Written Description*

We are not persuaded that the Examiner erred in rejecting claims 1–10 and 19 under 35 U.S.C. § 112, first paragraph for failing to comply with the written description requirement.

Claim 1 recites “a device, comprising: at least one processor; and at least one memory including computer program code, wherein the at least one memory and the computer program are configured to, with the at least one processor, cause the device to” perform functions. The Examiner contends this broad manner of claiming functional implementations encompasses all possible algorithms or computer implementations of performing the functions. Final Act. 8. The Examiner also contends there is insufficient written description for claim 1 because the written description does not provide any details on how the rules are generated and only recites the functional language of the claim without providing insight into the structure or algorithm for achieving the claimed function. *Id.* at 9.

“[C]ompliance with the written description requirement is a question of fact.” *Hyatt v. Boone*, 146 F.3d 1348, 1352 (Fed. Cir. 1998) (citing *Vas-Cath, Inc. v. Mahurkar*, 935 F.2d 1555, 1563 (Fed. Cir. 1991)).

A written “description must ‘clearly allow persons of ordinary skill in the art to recognize that [the inventor] invented what is claimed.’” *Ariad Pharms., Inc. v. Eli Lilly & Co.*, 598 F.3d 1336, 1351 (Fed. Cir. 2010) (en banc) (alteration in original) (quoting *Vas-Cath*, 935 F.2d at 1563). “In other words, the test for sufficiency is whether the disclosure of the application relied upon reasonably conveys to those skilled in the art that the inventor had possession of the claimed subject matter as of the filing date.” *Id.* (citing *Vas-Cath*, 935 F.2d at 1563). “Although [the applicant] does not

have to describe exactly the subject matter claimed, . . . the description must clearly allow persons of ordinary skill in the art to recognize that [he or she] invented what is claimed.” *Vas-Cath*, 935 F.2d at 1563 (alteration in original) (quoting *In re Gosteli*, 872 F.2d 1008, 1012 (Fed. Cir. 1989)). Put another way, “the applicant must . . . convey with reasonable clarity to those skilled in the art that, as of the filing date sought, he or she was in possession of the invention.” *Vas-Cath*, 935 F.2d at 1563–64.

It is not enough that one skilled in the art could write a program to achieve the claimed function because the specification must explain how the inventor intends to achieve the claimed function to satisfy the written description requirement. *See Vasudevan Software, Inc. v. MicroStrategy, Inc.*, 782 F.3d 671, 681-683 (Fed. Cir. 2015) (reversing and remanding the district court’s grant of summary judgment of invalidity for lack of adequate written description where there were genuine issues of material fact regarding “whether the specification show[ed] possession by the inventor of how accessing disparate databases is achieved”).

Appellants argue that the Specification (at page 17 describing step 8) supports how the rule generator works, and additionally, that one of ordinary skill in the art would be able to implement the invention. App. Br. 11. The Examiner responds that whether the royalty payment “could be determined” is not persuasive because the written description requirement is that one of ordinary skill in the art can reasonably conclude that the inventor had possession of the claimed invention. Ans. 4.

The portion of the Specification identified by Appellants as support for the claim simply states: “The rule generator pulls the roaming agreement from the roaming agreement database and works out all configuration

parameters, filter rules, firewall settings etc. (step 8).” Spec. p. 17 (describing step 8). This is insufficient because the question of written description “is ‘not a question of whether one skilled in the art *might* be able to construct the patentee’s device from the teachings of the disclosure . . . . Rather, it is a question whether the application necessarily discloses that particular device.” *Lockwood v. American Airlines, Inc.*, 107 F.3d 1565, 1572 (Fed. Cir. 1997) (quoting *Jepson v. Coleman*, 314 F.2d 533, 536 (CCPA 1963)). *See also Ariad Pharmaceuticals, Inc. v. Eli Lilly and Co.*, 598 F.3d 1336, 1352 (Fed. Cir. 2010) (“[W]e have repeatedly stated that actual ‘possession’ or reduction to practice outside of the specification is not enough. Rather, . . . it is the specification itself that must demonstrate possession.”). “A description which renders obvious the invention for which an earlier filing date is sought is not sufficient.” *Lockwood*, 107 F.3d at 1572.

Appellants do not rebut the Examiner’s finding that there is a lack of disclosure concerning how to perform the steps of the claims. Therefore, given the record before us, and absent persuasive rebuttal, we agree with the Examiner’s findings. Accordingly, we sustain the rejection of claims 1–10 and 19 under 35 U.S.C. § 112, first paragraph for failing to comply with the written description requirement.<sup>2</sup>

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<sup>2</sup> In the event of further prosecution, the Examiner may wish to additionally evaluate claims 11–18 under 35 U.S.C. § 112, first paragraph, as failing to comply with the written description requirement for the same reasons.

*Indefiniteness*

We agree with Appellants that the Examiner erred in rejecting claims 1–10 under 35 U.S.C. § 112, second paragraph as being indefinite.

“[A] claim is indefinite when it contains words or phrases whose meaning is unclear.” *Packard v. Lee*, 751 F.3d 1307, 1310 (Fed. Cir. 2014) (per curiam). The Examiner finds it is not clear from the written description how the device generates rules to determine configuration settings. Final Act. 10–11; Ans. 9–11.

We agree with Appellants that the issue presented by the Examiner, however, is not one of indefiniteness, but of written description, which is addressed above.

Accordingly, we do not sustain the rejection of claims 1–10 under 35 U.S.C. § 112, second paragraph as being indefinite.

*Section 102 and 103 Rejections*

We agree with Appellants that one of ordinary skill in the art would not view Figure 2 of Alfano as a “device” because it illustrates multiple devices in two networks. App. Br. 12. Accordingly, we do not sustain the rejection of claims 1–5, 11–15, and 19 under 35 U.S.C. § 102(b) as anticipated by Alfano.

However, we note that in the event of further prosecution, the Examiner may wish reevaluate all the claims again under 35 U.S.C. § 112, first paragraph as failing to comply with the written description requirement, because we agree with the Examiner’s conclusion that the Specification does not appear to disclose a single device implementing the invention. Ans. 14–15.

Because we do not sustain the rejection of independent claims 1 and 11, we also do not sustain the rejections of dependent claims 6–10 and 16–18, which stand rejected under 35 U.S.C. § 103(a), because the Examiner does not allege that Ekeroth or Bos cure the deficiency of Alfano.

#### CONCLUSION

We sustain the rejection of claims 1–19 under 35 U.S.C. § 101.

We sustain the rejection of claims 1–10 and 19 under 35 U.S.C. § 112, first paragraph as failing to comply with the written description requirement.

We do not sustain the rejection of claims 1–10 under 35 U.S.C. § 112, second paragraph, as being indefinite.

We do not sustain the rejection of claims 1–5, 11–15, and 19 under 35 U.S.C. § 102(b).

We do not sustain the rejections of claims 6–10 and 16–18 under 35 U.S.C. § 103(a).

#### DECISION

Because we affirm at least one ground of rejection for each claim on appeal, we affirm the Examiner’s decision rejecting claims 1–19. *See* 37 C.F.R. § 41.50(a)(1).

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