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UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

Ex parte ROBERT BRUCE KLEVE and
JOHN ROBERT VAN WIEMEERSCH

Appeal 2018-002523
Application 12/565,214
Technology Center 3600

Before JENNIFER D. BAHR, LINDA E. HORNER, and
BRANDON J. WARNER, *Administrative Patent Judges*.

BAHR, *Administrative Patent Judge*.

DECISION ON APPEAL

STATEMENT OF THE CASE

Robert Bruce Kleve and John Robert Van Wiemeersch (Appellants)¹ appeal under 35 U.S.C. § 134 from the Examiner's decision rejecting claims 1–6, 9, 21–26, 29, and 30. We have jurisdiction under 35 U.S.C. § 6(b).

We AFFIRM.

¹ According to Appellants, the real party in interest is Ford Global Technologies, LLC. Appeal Br. 1.

THE CLAIMED SUBJECT MATTER

Claim 1, reproduced below, is illustrative of the claimed subject matter.

1. A computer-implemented method comprising:
 - receiving a diagnostic request signal requesting vehicle component diagnosis;
 - retrieving a vehicle state threshold parameter;
 - determining that a vehicle state value exceeds a threshold defined by the parameter; and
 - responsive to the vehicle state value exceeding the threshold defined by the parameter:
 - receiving a vehicle component diagnostic status;
 - and
 - displaying the diagnostic status on vehicle display.

REJECTIONS

- I. Claims 1–6, 9, 21–26, 29, and 30 stand rejected under 35 U.S.C. § 112, second paragraph, as indefinite.
- II. Claims 1–6, 9, 21–26, 29, and 30 stand rejected under 35 U.S.C. § 101 as being directed to patent-ineligible subject matter.
- III. Claims 1–6, 21–26, and 30 stand rejected under 35 U.S.C. § 103(a) as unpatentable over Sonnenrein (US 2004/0112124 A1, pub. June 17, 2004) and Tripathi (US 2003/0208309 A1, pub. Nov. 6, 2003).
- IV. Claims 9 and 29 stand rejected under 35 U.S.C. § 103(a) as unpatentable over Sonnenrein, Tripathi, and Johnson (US 2003/0004741 A1, pub. Jan. 2, 2003).

DISCUSSION

Rejection I

Independent claims 1, 21, and 30 recite, in relevant part, retrieving “a vehicle state threshold parameter” and determining “that a vehicle state value exceeds a threshold defined by the parameter.” Claims App. 1–4. The Examiner’s stated basis for rejecting the claims under 35 U.S.C. § 112, second paragraph, as indefinite is that “[i]t is not clear . . . whether the two thresholds are the same threshold or different thresholds.” Final Act. 2.

Appellants argue that “there is only one noun-usage of the word ‘threshold’ and thus there is only one threshold.” Appeal Br. 5. Appellants assert that “vehicle state threshold” simply describes (as an adjective phrase) the type of parameter being retrieved, and “a threshold defined by the parameter” represents the actual threshold value. *Id.* According to Appellants, “[a]s an example, a [vehicle state threshold] parameter would be something like ‘temperature’ and the threshold would be a temperature value.” *Id.*

We agree with Appellants that the limitations at issue do not render the claims indefinite. A person of ordinary skill in the art would understand that “the threshold is a component of the parameter.” *Id.* In other words, the threshold is a value that corresponds to the vehicle state threshold parameter, and, thus, the claims require only one threshold. Accordingly, we do not sustain the Examiner’s rejection of claims 1–6, 9, 21–26, 29, and 30 under 35 U.S.C § 112, second paragraph, as indefinite.

Rejection II

In contesting this rejection, Appellants reference certain limitations recited in independent claim 1, but otherwise present arguments without regard to any particular claim. *See* Appeal Br. 5–6; Reply Br. 3–4. Thus, we select independent claim 1 as representative of the claims subject to this rejection, with claims 2–6, 9, 21–26, 29, and 30 standing or falling with claim 1. 37 C.F.R. § 41.37(c)(1)(iv).

Section 101 of the patent law provides that one may obtain a patent for “any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof.” 35 U.S.C. § 101. The Supreme Court has held that this provision includes important exceptions, notably those that prohibit one from patenting abstract ideas, laws of nature, or natural phenomena. *Alice Corp. Pty. Ltd. v. CLS Bank Int’l*, 573 U.S. 208, 216–17 (2014). Although a law of nature or an abstract idea is not patentable, the application of these concepts may be patentable. *Mayo Collaborative Servs. v. Prometheus Labs., Inc.*, 566 U.S. 66, 70–72 (2012).

The Supreme Court has set forth “a framework 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 (citing *Mayo*, 566 U.S. at 71–72). Under that framework, we first “determine whether the claims at issue are directed to one of those patent-ineligible concepts”—i.e., a law of nature, a natural phenomenon, or an abstract idea. *Id.* If so, we secondly “consider the elements of each claim both 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 77–79). The Supreme Court

has described the second part of the analysis as “a 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).

Part One: Are the Claims Directed to an Abstract Idea?

The Federal Circuit has described the first step as a determination of the “basic character of the claimed subject matter.” *Internet Patents Corp. v. Active Network, Inc.*, 790 F.3d 1343, 1348 (Fed. Cir. 2015) (citing *Bancorp Servs., L.L.C. v. Sun Life Assurance Co. of Canada*, 687 F.3d 1266, 1273–74 (Fed. Cir. 2012)). The Federal Circuit has also indicated that this step should determine whether a claimed method “recites an abstraction—an idea, having no particular concrete or tangible form.” *Ultramercial, Inc. v. Hulu, LLC*, 772 F.3d 709, 715 (Fed. Cir. 2014); *see also Alice*, 573 U.S. at 217 (“The ‘abstract ideas’ category embodies ‘the longstanding rule that “[a]n idea of itself is not patentable.””)” (quoting *Gottschalk v. Benson*, 409 U.S. 63, 67 (1972) (further quotations and citations omitted))).

The Examiner determines that claim 1 is “directed to the abstract idea of collecting and displaying data.” Final Act. 3; *see also* Ans. 4 (determining that “the limitations ‘receiving a diagnostic request’, and ‘retrieving vehicle state threshold parameter’ are mere data gathering, and the steps of ‘determining, ‘responsive to exceeding a threshold, receiving....’ and ‘displaying’ are mere data manipulation, and mathematical relationship thereof and thus an abstract idea”). The Examiner explains that “the steps of gathering and manipulating data . . . are an abstract idea similar to the concepts that have been identified as abstract by the courts.” Ans. 4 (citing

Digitech Image Techs., LLC v. Elecs. for Imaging, Inc., 758 F.3d 1344 (Fed. Cir. 2014); *Content Extraction & Transmission LLC v. Wells Fargo Bank, Nat. Ass’n*, 776 F.3d 1343 (Fed. Cir. 2014); *Elec. Power Grp., LLC v. Alstom S.A.*, 830 F.3d 1350 (Fed. Cir. 2016)).

Appellants do not contest the Examiner’s determination that claim 1 is directed to an abstract idea. *See* Appeal Br. 5–6 (presenting argument only with respect to whether the claim recites additional elements amounting to “something more” than the abstract idea itself); Reply Br. 3–4.

Part Two: Is There an Inventive Concept?

The Examiner determines that the claims do not include additional elements sufficient to amount to significantly more than the abstract idea. *See* Final Act. 3–4; Ans. 4. In particular, the Examiner explains that “the computer/processor . . . recited in claims 1, 21, and 30 is a generic computer component that performs generic computer functions (i.e. receiving, retrieving, and displaying).” Final Act. 3. The Examiner also explains that “[t]he claims recite a computer, a processor, and a vehicle display, which do not add meaningful limitations to the idea of collecting and displaying data beyond generally linking the abstract idea to a particular technological field or environment, that is, implementation via computers.” *Id.* According to the Examiner, “all the claimed steps . . . are generic computer functions that are well-understood, routine, and conventional activities previously known in the industry.” Ans. 4.

Appellants argue that the Examiner did not “consider[] the *whole solution presented by the whole claim*,” but, rather, “considered the elements individually without *any* regard to how the individual steps function in concert.” Appeal Br. 6. Appellants assert that “[t]he whole solution of the

claims is to receive a diagnostic request *and* a parameter, including a threshold value, and then to display a component diagnostic status when the threshold is exceeded.” *Id.* Appellants assert that “it is neither common nor typical for a vehicle to display a *component* diagnostic status in response to a vehicle state exceeding a threshold.” Reply Br. 3; *see also* Appeal Br. 6 (asserting that “[d]iagnostics are typically done by a mechanic or dealer, and diagnostic statuses are typically not displayed on a vehicle display”). According to Appellants, “the elements of the claims function as a whole solution that is atypical and uncommon, which is all that is required to pass the ‘something more’ threshold as explained in Example 35 of the December guidance.” Appeal Br. 6 (citing “Subject Matter Eligibility Examples: Business Methods,” issued December 15, 2016 (hereinafter “Guidance”)). We are not persuaded by Appellants’ argument.

In Example 35 of the Guidance, hypothetical claims directed to a method of conducting a secure ATM transaction were deemed eligible because the combination of steps “operate[d] in a non-conventional and non-generic way to ensure that the customer’s identity is verified in a secure manner that is more than the conventional verification process employed by an ATM alone.” Guidance 10. The Guidance explains that, “[i]n combination, these steps do not represent merely gathering data for comparison or security purposes, but instead set up a sequence of events that address unique problems associated with bank cards and ATMs (e.g., the use of stolen or ‘skimmed’ bank cards and/or customer information to perform unauthorized transactions).” *Id.* According to the Guidance, the example claims are similar to the eligible claims in *BASCOM Glob. Internet Servs., Inc. v. AT&T Mobility LLC*, 827 F.3d 1341 (Fed. Cir. 2016) because “the

claimed combination of additional elements presents a specific, discrete implementation of the abstract idea.” *Id.* However, unlike the claims at issue in *BASCOM*, Appellants’ claim 1 is not directed to a solution that improves an existing technological process (e.g., it does not improve the performance of a computer system itself). *See BASCOM*, 827 F.3d at 1351. Rather, the computer elements recited in the claim are simply invoked as conventional tools to collect, analyze, and display data. The Guidance also explains that the combination of steps in the example claims “describes a process that differs from the routine and conventional sequence of events normally conducted by ATM verification, such as entering a PIN, similar to the unconventional sequence of events in *DDR [Holdings, LLC v. Hotels.com, L.P.]*, 773 F.3d 1245 (Fed. Cir. 2014).” *Id.* However, in contrast to the claims in *DDR*, the steps in Appellants’ claim 1 are not “necessarily rooted in computer technology in order to overcome a problem arising in the realm of computer networks.” *DDR*, 773 F.3d at 1257.

Appellants have not provided any specificity regarding any particular inventive technology associated with the steps in claim 1. The computer elements described in the Specification and recited in the claim (e.g., “computer” and “display”) appear to function in a conventional manner to gather data, execute program instructions and operations, and output results. There is no further description, in the claims or the Specification, of any particular technology for performing the steps recited in the claim other than generic computer components used in their ordinary capacity as tools to apply the abstract idea. *See, e.g.*, Spec. 3, 4, 7, 8, 14, 15 (disclosing generic “server(s) 101, “cellular communication module 200,” and graphical display). In this regard, the “recitation of generic computer limitations does

not make an otherwise ineligible claim patent-eligible.” *DDR*, 773 F.3d at 1256 (citing *Alice*, 134 S.Ct. at 2358).

To the extent Appellants argue that the claim elements provide an inventive concept because they are directed to an allegedly novel and/or non-obvious solution (*see* Appeal Br. 6; Reply Br. 3), such an argument is unavailing. A finding of novelty or non-obviousness does not automatically lead to the conclusion that the claimed subject matter is patent-eligible. *See Diamond v. Diehr*, 450 U.S. 175, 188–89 (1981) (stating that “[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”).

Although the second step in the *Mayo/Alice* framework is termed a search for an “inventive concept,” the analysis is not an evaluation of novelty or nonobviousness, but rather, a search for “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.’” *Alice*, 573 U.S. at 217 (citation omitted); *see also SAP Am., Inc. v. InvestPic, LLC*, 898 F.3d 1161, 1163 (Fed. Cir. 2018) (“We may assume that the techniques claimed are [g]roundbreaking, innovative, or even brilliant, but that is not enough for eligibility. Nor is it enough for subject-matter eligibility that claimed techniques be novel and nonobvious in light of prior art, passing muster under 35 U.S.C. §§ 102 and 103.” (citations and quotations omitted)).

For the above reasons, the recited elements, considered individually and as an ordered combination, do not constitute an “inventive concept” that transforms independent claim 1 into patent-eligible subject matter. *See*

Alice, 573 U.S. at 217. Accordingly, we sustain the rejection of claim 1, and of claims 2–6, 9, 21–26, 29, and 30 falling therewith, under 35 U.S.C. § 101 as directed to patent-ineligible subject matter.

Rejection III

Appellants rely on the same arguments asserted for patentability of independent claim 1 in contesting the rejection of independent claims 21 and 30. *See* Appeal Br. 6–8; Reply Br. 4–5. Appellants do not assert any separate arguments for patentability of dependent claims 2–6 and 22–26, apart from their dependence, directly or indirectly, from one of claims 1, 21, and 30. *See* Appeal Br. at 8. We select claim 1 as representative, with claims 2–6, 21–26, and 30 standing or falling therewith.

The Examiner finds that Sonnenrein discloses most of the limitations recited in claim 1, except for “determining that a vehicle state value exceeds a threshold defined by the parameter; and responsive to the vehicle state value exceeding the threshold defined by the parameter: receiving a vehicle component diagnostic status.” Final Act. 5. However, the Examiner finds that Tripathi discloses this feature. *See id.* (citing Tripathi ¶ 27). The Examiner determines that it would have been obvious to modify Sonnenrein “with the vehicle analyzer, as taught by Tripathi[], in order to determine whether the vehicle to be diagnosed operates outside of the normal operation, therefore, providing a means of early detection of failure of specific components.” *Id.* at 5–6 (citing Tripathi ¶¶ 8–9, 15–16). According to the Examiner, “one skilled in the art could have combined the elements as claimed by known methods with no change in their respective

functions, and the combination would have yielded predictable results.” *Id.* at 6.

The Examiner clarifies in the Answer that Sonnenrein discloses a server (service center 20) receiving a diagnostic request, selecting diagnostic parameters, sending the parameters to a vehicle, receiving diagnostic data from the vehicle, and sending a diagnostic status back to the vehicle, but does not disclose *how* the data is evaluated by the server to detect a problem. *See* Ans. 6 (citing Sonnenrein ¶ 45). The Examiner explains that Tripathi cures this deficiency by disclosing “that analysis is done on a server level ‘at the master database’, and according to exceeding threshold parameters ‘if data is outside statistical limits.’” *Id.* (citing Tripathi ¶ 27).

Appellants argue that Tripathi discloses “software operating at ‘the master database,’ so this already fails to meet the claim limitation of a single processor (which interfaces with a vehicle display) performing all the steps thereof.” Appeal Br. 7. This argument is unpersuasive because it is not commensurate with the scope of claim 1, which does not recite that a single processor performs all of the steps. *See In re Self*, 671 F.2d 1344, 1348 (CCPA 1982) (noting that it is well established that limitations not appearing in the claims cannot be relied upon for patentability). Moreover, even if the claim recited a limitation requiring that a single processor perform the steps, Appellants’ argument would still be unavailing. The Examiner takes the position that “[t]he combination of Sonnenrein and Tripathi would result in all the steps being performed on a server level[,] and that reads on the single processor limitation.” Ans. 6. In this regard, Appellants do not specifically address the Examiner’s position or explain why it is deficient.

Appellants assert that Tripathi “teaches that the system sends a phone message ‘that suggests *how* to diagnose the problem[,]’ [w]hich, presumably, in this case, would be ‘call a mechanic and have them perform the process of Sonnenrein.’” Appeal Br. 7; *see also id.* at 8 (stating that “[t]he user would then call a mechanic (Sonnenrein) and the mechanic would *remotely* define a set of diagnostic parameters”). According to Appellants, “[t]he problem with this combination [of Sonnenrein and Tripathi] is that there is a human being smack in the middle of the process, and nothing in [Tripathi] or Sonnenrein allows one to remove that human being.” Reply Br. 5. We are not persuaded by this line of argument. Appellants do not point to, nor do we find, any evidence that either of the respective processes in Sonnenrein or Tripathi requires a human being who cannot be removed. *See* Sonnenrein ¶ 29 (disclosing service center 20 being associated with a mobile radio gateway through which data can be exchanged with a plurality of vehicles, and service center 20, not a human being, identifying suitable diagnostic mechanisms and/or diagnostic parameters and transferring them to a vehicle via mobile radio gateways); Tripathi ¶¶ 23, 25–27 (disclosing “a vehicle analyzer, such as an OBD scan tool hardware device,” collecting, processing, and transmitting data, and software on a master database performing statistical analysis to establish upper and lower control limits and determining if there are any trends in the data or if data is outside statistical limits). In this regard, Appellants’ assertion amounts to nothing more than attorney argument unsupported by evidence and, thus, is entitled to little, if any, weight. *In re Geisler*, 116 F.3d 1465, 1470 (Fed. Cir. 1997); *see also In re Pearson*, 494 F.2d 1399,

1405 (CCPA 1974) (An attorney’s arguments in a brief cannot take the place of evidence.).

Appellants assert that “neither reference ever defines automatically determining which component data to pull and display based on a vehicle state exceeding a threshold.” Reply Br. 5 (boldface and italics omitted). This assertion is unavailing because it is not commensurate with the scope of claim 1, which does not recite automatically determining which component to retrieve and display. *See Self*, 671 F.2d at 1348.

For the above reasons, Appellants do not apprise us of error in the Examiner’s determination that the subject matter of claim 1 would have been obvious. Accordingly, we sustain the rejection of claim 1, and of claims 2–6, 21–26, and 30 falling therewith, under 35 U.S.C. § 103 as unpatentable over Sonnenrein and Triphathi.

Rejection IV

In contesting the rejection of dependent claims 9 and 29, Appellants rely solely on the arguments presented for respective base claims 1 and 21. *See* Appeal Br. 8. For the reasons discussed above, Appellants’ arguments do not apprise us of error in the rejection of claims 1 and 21, and, likewise, do not apprise us of error in the rejection of claims 9 and 29. Accordingly, we sustain the rejection of claims 9 and 29 under 35 U.S.C. § 103 as unpatentable over Sonnenrein, Triphathi, and Johnson.

DECISION

The Examiner’s decision rejecting claims 1–6, 9, 21–26, 29, and 30 under 35 U.S.C. § 112, second paragraph, as indefinite is REVERSED.

Appeal 2018-002523
Application 12/565,214

The Examiner's decision rejecting claims 1–6, 9, 21–26, 29, and 30 under 35 U.S.C. § 101 as being directed to patent-ineligible subject matter is AFFIRMED.

The Examiner's decision rejecting claims 1–6, 21–26, and 30 under 35 U.S.C. § 103(a) as unpatentable over Sonnenrein and Triphathi is AFFIRMED.

The Examiner's decision rejecting claims 9 and 29 under 35 U.S.C. § 103(a) as unpatentable over Sonnenrein, Triphathi, and Johnson 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). *See* 37 C.F.R. § 1.136(a)(1)(iv).

AFFIRMED