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UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

Ex parte ALLAN ROY GALE and DAVID ALLEN KOWALSKI

Appeal 2017-010588
Application 14/265,726¹
Technology Center 3600

Before DAVID M. KOHUT, ERIC B. CHEN, and
MATTHEW R. CLEMENTS, *Administrative Patent Judges*.

CLEMENTS, *Administrative Patent Judge*.

DECISION ON APPEAL

Appellants appeal under 35 U.S.C. § 134(a) from the Examiner's Final Rejection of claims 1–7 and 15–20. Claims 8–14 were withdrawn from consideration. We have jurisdiction under 35 U.S.C. § 6(b).

We AFFIRM.

¹ Appellants identify the real party in interest as “Ford Global Technologies, LLC.” App. Br. 1.

STATEMENT OF THE CASE

The present invention is generally directed to a method and apparatus for locating optimal refueling stations. Spec. ¶ 1. For example, the apparatus may recommend a fuel dispensary (e.g., fuel station) based on fuel-quality statistics, such as the miles-per-gallon efficiency of a dispensary's fuel. Spec. ¶¶ 4–5. Claim 1 is reproduced below (disputed limitation in italics).

1. A system comprising:

a processor configured to:

register an amount of fuel dispensed to a vehicle;

associate a fuel-dispensary with the amount of fuel;

determine miles-per-gallon efficiency while the dispensed fuel is being used by the vehicle; and

save a record of the efficiency of the dispensed fuel, in miles-per-gallon, with respect to a record associated with the fuel-dispensary.

App. Br., Claims App. 1.

THE REJECTIONS

Claims 1–7 and 15–20 stand rejected under 35 U.S.C. § 101 as directed to a judicial exception of statutory subject matter. Final Act. 4–8; Ans. 6–9.²

² The Answer denotes the rejection under 35 U.S.C. § 101 as a new ground of rejection. Ans. 6. However, the Answer clarifies that the new ground does not fundamentally change the rejection set forth by the Final Action, but merely identifies judicially-recognized abstract ideas (i.e., Federal

Claims 1–3, 5, 7, 15–17, 19, and 20 stand rejected under 35 U.S.C. § 102(a)(2) as anticipated by Pierce (US 2015/0088613 A1; published Mar. 26, 2015). Final Act. 9–10; Ans. 2–4.

Claims 4, 6, and 18 stand rejected under 35 U.S.C. § 103 as unpatentable over Pierce and Leone (US 2012/0024262 A1; published Feb. 2, 2012). Final Act. 11–12; Ans. 5.

REJECTION OF CLAIMS 1–7 AND 15–20
UNDER 35 U.S.C. § 101

We select claim 1 as representative of claims 1–7 and 15–20 for this rejection. *See* 37 C.F.R. 41.37(c)(1)(iv) (representative claims); App. Br. 4–6 (addressing claims 1–7 and 15–20 as a group). For the following reasons, we are unpersuaded of error in this rejection of claim 1.

A. Principles of Law

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 Int’l*, 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 an idea, by itself, is not patentable. *Alice*, 134 S.Ct. at 2354-55 (quoting *Gottschalk v. Benson*, 409 U.S. 63, 67 (1972)).

Circuit decisions) similar to the concepts recited by Appellants’ claims. *Id.* at 10. Appellants agree the “new grounds of rejection . . . is not new.” Reply Br. 2. Although the Examiner’s Answer cites additional case law, we agree with Appellants and determine that the additional cases do not change the “basic thrust of the rejection.” *In re Kronig*, 539 F.2d 1300, 1303 (CCPA 1976).

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. 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.* There is no definitive rule to determine what constitutes an “abstract idea.” Rather, the Federal Circuit has explained that “both [it] and the Supreme Court have found it sufficient to compare claims at issue to those claims already found to be directed to an abstract idea in previous cases.” *Enfish, LLC v. Microsoft Corp.*, 822 F.3d 1327, 1334 (Fed. Cir. 2016); *see also Amdocs (Israel) Ltd. v. Openet Telecom, Inc.*, 841 F.3d 1288, 1294 (Fed. Cir. 2016) (explaining that, in determining whether claims are patent-eligible under § 101, “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.”). The Federal Circuit also noted that “examiners are to continue to determine if the claim recites (i.e., sets forth or describes) a concept that is similar to concepts previously found abstract by the courts.” *Amdocs*, 841 F.3d at 1294 n.2 (internal citation omitted).

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.” *Alice*, 134 S.Ct. at 2355 (quoting *Mayo Collaborative Servs. v. Prometheus Labs., Inc.*, 566 U.S. 66, 79, 78 (2012)). 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.* (quoting *Mayo*, 566 U.S. at 73) (alteration in original). Mere use of computers, even in conjunction with other hardware, does not alone transform an abstract idea to significantly more. *See e.g.*, *Content Extraction & Transmission LLC v. Wells Fargo Bank*, 776 F.3d 1343, 1347 (Fed. Cir. 2014) (patent-ineligible claims requiring a computer and scanner), *cert denied*, 136 S.Ct. 119 (Mem) (2015); *CLS Bank Int’l v. Alice Corp. Pty.*, 717 F.3d 1269, 1286 (Fed. Cir. 2013) (“[S]imply appending generic computer functionality to lend speed or efficiency . . . does not meaningfully limit claim scope for purposes of patent eligibility.”), *aff’d* by *Alice*.

B. Examiner’s Findings

As to the first step of *Alice*’s two-step framework, the Examiner finds that the steps recited in claim 1 are “simply the organizing and comparison of data, which can be performed mentally and is an idea itself.” Final Act. 6 (citing *Cyberfone* and *SmartGene*). The Examiner also finds these operations are “directed to locating optimal refueling stations” (Ans. 7 (citing Spec. ¶ 1)), which is similar to the judicially-recognized abstract ideas of “collecting and comparing known information” in *Classen [Immunotherapies, Inc. v. Biogen IDEC]*, 659 F.3d 1057 (Fed. Cir. 2011), “data recognition and storage” in *Content Extraction*, and “collecting information, analyzing it, and displaying certain results of the collection and analysis” in *Electric Power Group, LLC v. Alstom S.A.*, 830 F.3d 1350 (Fed. Cir. 2016). Ans. 7.

As to the second step of *Alice*'s two-step framework, the Examiner finds the additional elements perform generic computer functions or a field of use limitation, neither of which add significantly more than the abstract idea. Final Act. 7; Ans. 8. The Examiner finds that “[t]he current invention offers no such improvement to computer technology (i.e. no technological improvements). The Examiner further points out that improvements to an abstract idea are not the same as improvements to computer technology. Here, . . . the improvement is to the abstract idea.” Ans. 10.

C. Analysis

Appellants contend claim 1 is directed to tracking, determining, and saving refueling data with regards to a refueling station, and that these concepts are not similar to the judicially-recognized abstract idea of longstanding (fundamental) commercial practices. App. Br. 4–5. In response, the Examiner agrees and newly directs Appellants to the abstract ideas of *Classen*, *Content Extraction*, and *Electric Power*. Ans. 7, 10.

Applying step one of the *Alice* analysis, we agree with the Examiner that claim 1 is directed to an abstract idea of locating optimal refueling stations. *Id.* Spec. ¶ 1 (“The illustrative embodiments generally relate to a method and apparatus for locating optimal refueling stations.”); *see also id.* ¶¶ 4–5 (The invention “save[s] a record of the efficiency of the dispensed fuel, in miles-per-gallon” (*id.* ¶ 4) in order “to determine a recommended fuel station . . . based on . . . fuel-quality statistics” (*id.* ¶ 5)). In fact, the independent claims are even broader because they do not recite determining an optimal refueling station or locating it. Independent claims 1 and 15 require only determining the miles-per-gallon efficiency of fuel associated with a dispensary and “saving a record of the efficiency of the dispensed

fuel, in miles-per-gallon, with respect to a record associated with the fuel-dispensary.”

Moreover, we agree with the Examiner that the claimed operations fall within the judicially-recognized abstract ideas of *Classen*, *Content Extraction*, and *Electric Power*. Ans. 7. The claimed invention collects data to review the effects of a dispensary’s fuel on a vehicle, which is similar to the collecting of data in *Classen* to review the effects of immunization schedules on patients. *Classen*, 659 F.3d at 1067–68. Further, the claimed invention, like the claims at issue in *Content Extraction*, are directed to collecting and storing data. *Content Extraction*, 776 F.3d at 1348. Further, the steps of “register,” “associate,” “determine,” and “save” data, as recited in claim 1, constitute data manipulation. It is well settled that “collecting information [data], analyzing it, and displaying certain results of the collection and analysis” are “a familiar class of claims ‘directed to’ a patent-ineligible concept.” *Elec. Power Grp.*, 830 F.3d at 1353 (Fed. Cir. 2016). Moreover, the recited steps also comprise actions that may be performed mentally or by pen and paper, which is another judicially-recognized category of abstract ideas. *See Elec. Power Grp. LLC v. Alstom S.A.*, 830 F.3d 1350, 1353 (Fed. Cir. 2016) (“analyzing information by steps people go through in their minds . . . , without more, [is] . . . within the abstract idea category”).

Accordingly, we agree with the Examiner with respect to step one of the *Alice* analysis, and we proceed to step two.

In the second step of our analysis under *Alice*,

we must examine the elements of the claim to determine whether it contains an “‘inventive concept’” sufficient to “transform” the

claimed abstract idea into a patent-eligible application. 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, 134 S.Ct. at 2357 (alterations in original) (internal citations omitted).

Appellants contend the claimed determination of fuel efficiency *for a dispensary’s fuel* is a technical improvement to the abstract idea of locating optimal fuel dispensaries, and thus transforms claim 1 into a patent-eligible application of the abstract idea. App. Br. 4–5; Reply Br. 2–3. The Examiner responds that this claimed determination is not an improvement to technology, but rather to the abstract idea. Ans. 10.

Appellants’ arguments are not persuasive. Claim 1 recites a generic processor as determining the dispensary’s fuel efficiency. The use of a generic computer “do[es] not alone transform an otherwise abstract idea into patent-eligible subject matter.”³ *FairWarning IP, LLC, v. Iatric Sys., Inc.*, 839 F.3d 1089, 1096 (Fed. Cir. 2016) (citing *DDR Holdings, LLC, v. Hotels.com, L.P.*, 773 F.3d 1245, 1256 (Fed. Cir. 2014)); *see also Alice*, 134 S. Ct. at 2358 (“Stating an abstract idea while adding the words ‘apply it

³ In the event of further prosecution, the Examiner may consider whether the claimed “processor configured to” perform the recited operations may invoke 35 U.S.C. § 112, para. 6 (*see Williamson v. Citrix Online, LLC*, 792 F.3d 1339, 1349 (Fed. Cir. 2015) (en banc) (“[W]e should abandon characterizing as ‘strong’ the presumption that a limitation lacking the word ‘means’ is not subject to § 112, para. 6.”)), and whether claim 1 may be a “single means” claim subject to a rejection under 35 U.S.C. § 112, first paragraph. *See In re Hyatt*, 708 F.2d 712, 714–15 (Fed. Cir. 1983) (A single means claim which covered every conceivable means for achieving the stated purpose was held non-enabling for the scope of the claim because the specification disclosed at most only those means known to the inventor.).

with a computer’ simply combines those two steps, with the same deficient result.”).

Appellants argue the invention improves *the abstract idea* of locating optimal refueling stations (App. Br. 5 (“The Examiner literally states ‘this measuring step is a function *or improvement* to the abstract idea of locating optimal refueling stations.’”); Reply Br. 2 (contending the issue of inventive concept “hinges on whether . . . the claims solve a particular problem in an atypical or uncommon manner”)), but an improvement does not satisfy *Alice’s* second step if it is merely “an improvement in wholly abstract ideas—the selection and mathematical analysis of information.” *SAP America Inc. v. Investpic, LLC*, 898 F.3d 1161, 1168 (Fed. Cir. 2018). The argued improvement is wholly within the selection, mathematical analysis, and reporting of information (namely information about a dispensary’s fuel), which does not add significantly more to the abstract idea. “[E]ven if a process of collecting and analyzing information is ‘limited to particular content’ or a particular ‘source,’ that limitation does not make the collection and analysis other than abstract. *Electric Power*, 830 F.3d at 1353, 1355 (citing cases).” *SAP America Inc.*, 898 F.3d at 1168 (Fed. Cir. 2018).

Appellants also do not identify any alleged technical solution to a technical problem, as the claims in *DDR* addressed. *See DDR*, 773 F.3d at 1248 (“The patents-in-suit disclose a system that provides a solution to this problem (for the host) by. . .”); *see also Bascom Glob. Internet Servs., Inc. v. AT&T Mobility LLC*, 827 F.3d 1341, 1350 (Fed. Cir. 2016) (“[*DDR* was] claiming a technical way to satisfy an existing problem[.] Similarly, . . . the [present] invention is . . . claiming a technology-based solution[.]”); *McRO*,

Inc. v. Bandai Namco Games Am. Inc., 837 F.3d 1299, 1314 (Fed. Cir. 2016).

Thus, we are not persuaded the Examiner erred in step two of the *Alice* analysis.

For the foregoing reasons, we are not persuaded of error in the 35 U.S.C. § 101 rejection of representative claim 1. Accordingly, we sustain this rejection of claims 1–7 and 15–20.

REJECTION OF CLAIMS 1–3, 5, 7, 15–17, 19, AND 20
UNDER 35 U.S.C. § 102(a)(2)

Independent claims 1 and 15 recite “save a record of the efficiency of the dispensed fuel, in miles-per-gallon, with respect to a record associated with the fuel-dispensary.” Claims 2, 3, 5, 7, 16, 17, 19, and 20 depend from one of independent claims 1 and 15.

The Examiner cites *Pierce*’s paragraph 85 as disclosing the limitation. Final Act. 9. The Examiner also states that “*Pierce* . . . teach[es] saving merchant data relating to fuel efficiency” by recording “several data factors for the driver and vehicle including average miles-per-gallon, fleet specific chain pricing[,] and various scores . . . [related to] merchant data, transaction data[,] and fuel related data. *Id.* at 4 (citing *Pierce* ¶¶ 62,–63, 67–71, 85–86).

Appellants argue that the Examiner has failed to show *Pierce* discloses this limitation because *Pierce* teaches only that miles-per-gallon efficiencies are recorded for vehicles, not for fuel associated with a fuel-dispensary. App. Br. 6–7.

We agree with Appellants that *Pierce* does not teach recording miles-per-gallon efficiency for fuel from a particular dispensary. Paragraph 85 of

Pierce teaches that “drivers and fleet managers are enabled . . . to access driver and vehicle statistics, routes, chain scores, and facility services.” Pierce further teaches that “data may be collected by the server 102 automatically or manually, providing visibility to vehicle idle times, distance traveled, average and real time speed, vehicle health, average miles per gallon, required fuel type(s), driver hours, etc.” Pierce ¶ 85. These disclosures teach determining “average miles per gallon” for a vehicle or a driver, but do not teach associating fuel with a merchant, much less saving a miles-per-gallon efficiency of a particular merchant’s fuel. *Id.*; *see also* Pierce, Figs. 1–34 (not showing a correspondence between miles-per-gallon fuel efficiencies and merchant identifications). .

In the Answer, the Examiner states that “[t]here is no mention or suggestion in the specification or claim that the mpg statistics must be discretely determined for an amount of fuel dispensed at a particular dispensary,” and concludes that “[t]his implies a determination of a miles-per-gallon efficiency for the particular vehicle.” Ans. 12.

We disagree with the Examiner’s conclusion. The independent claims recite explicitly, “associat[ing] a fuel-dispensary with the amount of fuel” and “sav[ing] a record of the efficiency of the dispensed fuel, in miles-per-gallon, *with respect to a record associated with the fuel-dispensary*” (emphasis added). The Examiner’s interpretation of claims 1 and 15 would rendering meaningless the language “with respect to a record associated with the fuel-dispensary.” The Examiner’s claim interpretation would also read the inventors’ express objective—tracking the quality of a dispensary’s fuel (Spec. ¶¶ 1–6)—out of the claims. *See In re Power Integrations, Inc.*, 884 F.3d 1370, 1376 (Fed. Cir. 2018) (“[A] problem with the board’s claim

construction is that it renders claim language meaningless.”); *id.* at 1377 (“[A] proper claim construction analysis endeavors to assign a meaning to a disputed claim term ‘that corresponds with . . . how the inventor describes his invention in the specification.’”).

For the foregoing reasons, we are persuaded that the Examiner erred. Accordingly, we do not sustain the rejection of claims 1–3, 5, 7, 15–17, 19, and 20 under 35 U.S.C. § 102(a)(2).

REJECTION OF CLAIMS 4, 6, AND 18
UNDER 35 U.S.C. § 103

The Examiner has not shown Leone cures the above deficiencies of Pierce. Final Act. 11 (finding Leone teaches to “save a record of the efficiency of the fuel in miles-per-dollar”). Accordingly, we also do not sustain the rejection of dependent claims 4, 6, and 18 under 35 U.S.C. § 103 for the same reasons as discussed above with respect to independent claims 1 and 15, from which the claims depend.

DECISION

We affirm the Examiner’s decision rejecting claims 1–7 and 15–20 under 35 U.S.C. § 101. We reverse the Examiner’s decision rejecting claims 1–3, 5, 7, 15–17, 19, and 20 under 35 U.S.C. § 102(a)(2). We reverse the Examiner’s decision rejecting claims 4, 6, and 18 under 35 U.S.C. § 103.

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