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UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

Ex parte JOHN ANDREW KELLEGREW, MICHAEL ROBERT ATLAS,
JEFFREY FRANCISCO, and MARK RAYMOND RINKER

Appeal 2017-007822
Application 13/706,542
Technology Center 3600

Before BRADLEY W. BAUMEISTER, JOSEPH P. LENTIVECH, and
JOHN R. KENNY, *Administrative Patent Judges*.

LENTIVECH, *Administrative Patent Judge*.

DECISION ON APPEAL

Pursuant to 35 U.S.C. § 134(a), Appellants¹ appeal from the Examiner's decision to reject claims 1–3 and 5–20. Claim 4 has been canceled. *See* App. Br. 17 (Claims App'x). We have jurisdiction over the pending claims under 35 U.S.C. § 6(b).

We affirm.

¹ Appellants state the real party in interest is Oracle International Corporation. App. Br. 2.

STATEMENT OF THE CASE

Appellants' Invention

Appellants' invention generally relates to managing clinical data.

Spec. ¶ 1. Claim 1, which is illustrative, reads as follows:

1. A non-transitory computer-readable medium having instructions stored thereon that, when executed by a processor, cause the processor to send data changes to a safety compliance management system associated with a regulatory agency, the sending comprising:

defining at least one data field of a plurality of data fields as a significant data field;

sending safety data stored within a first data object to the safety compliance management system within a first data packet, wherein the safety data is defined as a subset of data stored within an electronic data capture system, and wherein the safety data is associated with an adverse event of a clinical trial;

monitoring the safety data that is stored within the electronic data capture system;

identifying a plurality of changes to the safety data that has been sent to the safety compliance management system;

determining whether to report one of the plurality of changes,

in response to a first change to the safety data comprising a change to at least one data value associated with the significant data field, sending the changed safety data stored within a second data object to the safety compliance management system within a second data packet; and

in response to a second change to the safety data not comprising the change to at least one data value associated with the significant data field, not sending the changed safety data to the safety compliance management system.

Rejection

Claims 1–3 and 5–20 stand rejected under 35 U.S.C. § 101 because the claimed subject matter is judicially-excepted from patent eligibility under § 101. Final Act. 2–4.

Issue on Appeal

Did the Examiner err in finding that claims 1–3 and 5–20 are directed to subject matter that is judicially-excepted from patent eligibility under § 101?

PRINCIPLES OF LAW

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. 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, 82–84 (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,” such as an abstract idea. *Id.* The inquiry often is whether the claims are directed to “a

specific means or method” for improving technology or whether they are simply directed to an abstract end-result. *McRO, Inc. v. Bandai Namco Games Am. Inc.*, 837 F.3d 1299, 1314 (Fed. Circ. 2016). If the claims are not directed to a patent-ineligible concept, 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). 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 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).

CONTENTIONS AND ANALYSIS

Step 1

The Examiner finds the claims are directed to

[D]efining a data field as a significant data field, sending safety data associated with an adverse event of a clinical trial to a regulatory agency, monitoring the safety data, identifying changes to the sent safety data, determining whether to report the changes, and only sending the changed safety data to the regulatory agency when the change is to a data value associated with the significant data field. This is similar to comparing new and stored information and using rules to identify options (*SmartGene[, Inc. v. Advanced Biological Laboratories, SA*, 555 Fed. Appx. 950 (Fed. Cir. 2014)]) because the above identified functions are directed to comparing new changes in safety data to stored information regarding a significant data field and using significant data rules to identify options of reporting and not

reporting changes to the safety data. The abstract idea is also similar to using categories to organize, store, and transmit information (*Cyberfone [Systems, LLC v. CNN Interactive Group, Inc.]*, 558 Fed. Appx. 988 (2014)) because the above identified functions are directed to organizing and transmitting safety data stored within a first data object within a first data packet, wherein the safety data is defined as a subset of stored data, and subsequently transmitting changes in significant data categories of information.

Final Act. 2–3; *see also* Ans. 3–4 (additionally citing *Electric Power Grp., LLC v. Alstom S.A.*, 830 F.3d 1350 (Fed. Cir. 2016)).

Initially, Appellants argue the Examiner’s findings regarding the claims being directed to an abstract idea are improper because the Examiner “generaliz[es] the alleged abstract idea at such a high level (*i.e.*, comparing new and stored information) that it no longer has *ANY* relationship to the recited limitations” (App. Br. 6; *see also* Reply Br. 2) and because the Examiner relies on non-precedential opinions (Reply Br. 2). Appellants continue, arguing that contrary to the Examiner’s findings, there are no similarities between Appellants’ claim and the claims in *Cyberfone* or the claims in *SmartGene*. App. Br. 6–7. Appellants argue the claims, instead, are similar to the claims in *Enfish, LLC v. Microsoft Corp.*, 822 F.3d 1327, 1335 (Fed. Cir. 2016) because the claims provide improvements to the functioning of a computer. App. Br. 8–9.

According to Appellants:

The claimed embodiments solve problems of conventional safety management systems. The reduction of a lengthy process of reconciling changes to data stored within the system to data that has already been reported to a safety group is a significant technical challenge. As a result, efficiency gains resulting from only reporting the changed safety data are achieved.

App. Br. 9 (citing Spec. ¶ 68); *see also* Reply Br. 3.

Appellants also argue the claims are similar to the claims in *McRO, Inc. v. Bandai Namco Games Am. Inc.*, 837 F.3d 1299 (Fed. Cir. 2016) because “the present claims are allowable over the prior art, so there is no evidence that the claimed process was previously used either manually, or using a computer.” App. Br. 9–10.

Appellants’ arguments are unpersuasive. We agree with the Examiner that the claims are directed to an abstract concept of “collecting information, analyzing the information, and reporting certain results of the collection and analysis.” Ans. 3–4.

All the functions recited in Appellants’ claim 1, including, for example: (1) “defining at least one data field . . . as a significant data field;” (2) “sending safety data stored within a first data object to the safety compliance management system within a first data packet;” (3) “monitoring the safety data;” (4) “identifying a plurality of changes to the safety data that has been sent to the safety compliance management system;” (5) “determining whether to report one of the plurality of changes;” (6) “in response to a first change to the safety data comprising a change to at least one data value associated with the significant data field, sending the changed safety data stored within a second data object to the safety compliance management system within a second data packet;” and (7) “in response to a second change to the safety data not comprising the change to at least one data value associated with the significant data field, not sending the changed safety data to the safety compliance management system” are abstract processes of collecting, storing, and analyzing information of a specific content (i.e., safety data) based on categories associated with such safety

data (e.g., a data value associated with a significant data field) and transmitting a result of the analysis.

Information as such is intangible, and data analysis and categorization are abstract ideas. *See, e.g., Microsoft Corp. v. AT & T Corp.*, 550 U.S. 437, 451 n.12 (2007). Information collection and analysis, including when limited to particular content, is within the realm of abstract ideas. *See, e.g., Internet Patents Corp. v. Active Network, Inc.*, 790 F.3d 1343, 1349 (Fed. Cir. 2015); *Digitech*, 758 F.3d at 1351; *CyberSource Corp. v. Retail Decisions, Inc.*, 654 F.3d 1366, 1370 (Fed. Cir. 2011); *Electric Power Group, LLC v. Alstom S.A.*, 830 F.3d 1350, 1353, 1354 (Fed. Cir. 2016) (“collecting information, analyzing it, and displaying certain results of the collection and analysis” are “abstract-idea processes”); *Digitech Image Techs., LLC v. Elecs. for Imaging, Inc.*, 758 F.3d 1344, 1350 (Fed. Cir. 2014) (“organizing information through mathematical correlations”); *Content Extraction & Transmission LLC v. Wells Fargo Bank, Nat. Ass’n*, 776 F.3d 1343, 1347 (Fed. Cir. 2014) (“1) collecting data, 2) recognizing certain data within the collected data set, and 3) storing that recognized data in a memory” are abstract ideas).

We disagree that the claims are similar to the claims in *Enfish*. In *Enfish*, the self-referential table recited in the claims of *Enfish* was found to be “a specific type of data structure designed to improve the way a computer stores and retrieves data in memory.” *Enfish*, 822 F.3d at 1329. There, the specification disparaged conventional data structures and included language describing the “present invention” as including the features that made up the self-referential table. *Id.* In other words, the claims in *Enfish* were “directed to an improvement in the functioning of a computer. *Id.* at 1338.

By contrast, here, as discussed above, the claims are essentially directed to collecting, storing, and analyzing information and transmitting a result of the analysis – generalized steps to be performed on a computer using conventional computer activity. *See, e.g.*, Spec. ¶¶ 15–19, 45; Fig. 1; *see also Enfish* at 1338; *Electric Power Grp*, 830 F.3d at 1354 (explaining that claims directed to computerized collecting, analyzing, and displaying information were different from the claims in *Enfish*: “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.”). Appellants’ claims thus fit into the familiar class of claims that do not “focus . . . on [] an improvement in computers as tools, but on certain independently abstract ideas that use computers as tools.” *Electric Power*, 830 F.3d at 1354.

We also disagree that the claims are similar to the claims in *McRO*. The claims in *McRO* were directed to the creation of something physical—namely, the display of “lip synchronization and facial expressions” of animated characters on screens for viewing by human eyes. *Id.* at 1313. The claimed improvement was to how the physical display operated (to produce better quality images), unlike (what is present here) a claimed improvement in a mathematical technique with no improved display mechanism. The claims in *McRO* thus were not abstract in the sense that is dispositive here.

And those claims also avoided being “abstract” in another sense (based on a contrast not with “physical,” but with “concrete”): they had the specificity required to transform a claim from one claiming only a result to one claiming a way of achieving it. *McRO*, 837 F.3d at 1314; *see Finjan, Inc. v. Blue Coat Sys., Inc.*, 879 F.3d 1299, 1305–06 (Fed. Cir. 2018); *Apple,*

Inc. v. Ameranth, Inc., 842 F.3d 1229, 1241 (Fed. Cir. 2016); *Affinity Labs of Texas, LLC v. DIRECTV, LLC*, 838 F.3d 1253, 1265 (Fed. Cir. 2016); see also *Two-Way Media*, 874 F.3d at 1337; *Secured Mail Solutions LLC v. Universal Wilde, Inc.*, 873 F.3d 905, 909 (Fed. Cir. 2017); *RecogniCorp*, 855 F.3d at 1326; *Symantec*, 838 F.3d at 1316.

Similarly, in *Thales Visionix Inc. v. United States*, 850 F.3d 1343, 1348–49 (Fed. Cir. 2017), the improvement was in a physical tracking system. The use of mathematics to achieve an improvement no more changed the conclusion that improved physical things and actions were the subject of the claimed advance than it did in *Diamond v. Diehr*, 450 U.S. 175 (1981). Here, in contrast, the focus of the claims is not a physical-realm improvement, but an improvement in wholly abstract ideas—the collection and analysis of information, followed by a reporting of the results.

Step 2

Turning to the second step of the analysis, the Examiner further finds that the additional elements recited in the claims are not sufficient to amount to significantly more than the abstract idea. Final Act. 3–4. We agree with the Examiner that the claim limitations, when viewed individually and as a whole, do not transform the claim to something significantly more than an abstract idea. Final Act. 3–4; Ans. 5–6.

Appellants argue that the pending claims contain elements that in combination are non-conventional because “[n]o prior art is presented that alleges to anticipate or make obvious of any of the pending claims.” App. Br. 12. Appellants argue the claims are similar to the claims in *BASCOM Glob. Internet Servs., Inc. v. AT&T Mobility LLC*, 827 F.3d 1341 (Fed.

Cir. 2016) because they “are indicative of ‘an inventive concept [that] can be found in the ordered combination of claim limitations that transform the abstract idea of filtering content into a particular, practical application of that abstract idea.’” App. Br. 12 (quoting *Bascom*, 827 F.3d at xxx) (brackets in original).

We disagree that the claims are similar to the claims in *BASCOM* because they allegedly are directed to computer-related technology and improve upon existing technological processes. Appellants’ claims do not go beyond generic functions, and Appellants do not adequately identify technical means for performing the claimed steps that are arguably an advance over conventional computer technology. See *Electric. Power*, 830 F.3d at 1351.

Features such as, for example, a non-transitory computer-readable medium, a processor, a safety compliance management system, and an electronic data capture system, recited in claim 1, are described and claimed generically rather than with the specificity necessary to show how those components provide a concrete solution to a technical problem addressed by the claims. That is, the claims at issue do not require any non-conventional computer components, or even a “non-conventional and non-generic arrangement of known, conventional pieces,” rather, they merely call for performance of the claimed steps “on a set of generic computer components.” *Bascom*, 827 F.3d at 1349–52. “We have repeatedly held that such invocations of computers and networks that are not even arguably inventive are insufficient to pass the test of an inventive concept in the application of an abstract idea.” *Elec. Power*, 830 F.3d at 1355 (quotation omitted).

To the extent Appellants argue the claims are directed to novel and nonobvious subject matter and, therefore, necessarily entail an inventive concept that transforms the claims to significantly more than the abstract idea, we disagree. Although the second step in the *Alice/Mayo* framework is termed a search for an “inventive concept,” the analysis is not an evaluation of novelty or non-obviousness, 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*, 134 S. Ct. at 2355. A novel and nonobvious claim directed to a purely abstract idea is, nonetheless, patent-ineligible. *See Mayo*, 566 U.S. at 90.

Conclusion

Because Appellants’ claims 1–3 and 5–20 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.

DECISION

We affirm the Examiner’s rejection of claims 1–3 and 5–20 under 35 U.S.C. § 101.

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