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UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

Ex parte JAMES BARRY, JAMES COLE, JEFFREY DEVANEY,
THOMAS O'HALLORAN, and MATT MARCELLA

Appeal 2017-008581
Application 11/780,811¹
Technology Center 3600

Before MURRIEL E. CRAWFORD, BIBHU R. MOHANTY, and
BRUCE T. WIEDER, *Administrative Patent Judges*.

WIEDER, *Administrative Patent Judge*.

DECISION ON APPEAL

This is a decision on appeal under 35 U.S.C. § 134 from the Examiner's final rejection of claims 1–11 and 13–19. We have jurisdiction under 35 U.S.C. § 6(b).

We AFFIRM.

CLAIMED SUBJECT MATTER

Appellants' invention relates to a method and system for determining fuel pricing for aircraft. (Spec. ¶ 3.)

¹ According to Appellants, the real party in interest is Passur Aerospace, Inc. (f/k/a Megadata Corporation). (Appeal Br. 2.)

Claims 1 and 11 are the independent claims on appeal. Claim 1 is illustrative. It recites:

1. A non-transitory computer-readable storage medium storing a set of instructions executable by a processor, the set of instructions being operable to:
 - receive an aircraft identifier corresponding to an aircraft;
 - retrieve information on the basis of the aircraft identifier, the information comprising a comparison between a predicted fuel requirement determined from at least one previous visit and an actual fuel purchase from the at least one previous visit;
 - determine an attractiveness of an operator of the aircraft as a potential customer based on at least the retrieved information, the attractiveness being decreased when the comparison indicates at least a predetermined disparity between the predicted fuel requirement and the actual fuel purchase; and
 - determine a suggested fuel price based on at least the attractiveness of the operator as a potential customer, wherein a suggested fuel price for an operator having a high attractiveness is lower than a suggested fuel price for an operator having a low attractiveness.

REJECTION

Claims 1–11 and 13–19 are rejected under 35 U.S.C. § 101 as directed to a judicial exception without significantly more.

ANALYSIS

“Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.” 35 U.S.C. § 101. Section 101, however, “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, 589 (2013)).

Alice applies a two-step framework, earlier set out in *Mayo Collaborative Services v. Prometheus Laboratories, Inc.*, 566 U.S. 66 (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.

Under the two-step framework, it must first be determined if “the claims at issue are directed to a patent-ineligible concept.” *Id.* If the claims are determined to be directed to a patent-ineligible concept, e.g., an abstract idea, then the second step of the framework is applied to determine if “the elements of the claim . . . contain[] an ‘inventive concept’ sufficient to ‘transform’ the claimed abstract idea into a patent-eligible application.” *Id.* at 2357 (citing *Mayo*, 566 U.S. at 72–73, 79).

With regard to step one of the *Alice* framework, the Examiner determines that claim 1 is “directed to the abstract idea of ‘determining a suggested fuel price based on at least the attractiveness of the operator as a potential customer.’” (Final Action 8, emphasis omitted.)

Appellants argue that the Examiner erred by “oversimplifying the asserted abstract idea.” (Appeal Br. 8.)

Under step one of the *Alice* framework, we “look at the ‘focus of the claimed advance over the prior art’ to determine if the claim’s ‘character as a whole’ is directed to excluded subject matter.” *Affinity Labs of Texas, LLC v. DIRECTV, LLC*, 838 F.3d 1253, 1257 (Fed. Cir. 2016) (quoting *Elec. Power Grp., LLC v. Alstom S.A.*, 830 F.3d 1350, 1353 (Fed. Cir. 2016)).

The Specification provides evidence as to what the claimed invention is directed. In this case, the Specification is titled “Method and System for Determining Fuel Pricing.” (Spec. 1, emphasis omitted.) Claim 1 provides further evidence. Claim 1 recites “receive an aircraft identifier,” “retrieve information on the basis of the aircraft identifier,” “determine an attractiveness of an operator of the aircraft as a potential customer,” “and determine a suggested fuel price.” In other words, information is received, related information is retrieved, a rule/algorithm is applied, and results are determined.

Although we and the Examiner describe, at different levels of abstraction, to what the claims are directed, it is recognized 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). That need not and, in this case does not, “impact the patentability analysis.” *Id.* at 1241.

“[W]e have treated collecting information, including when limited to particular content (which does not change its character as information), as within the realm of abstract ideas.” *Elec. Power Grp.*, 830 F.3d at 1353. “In a similar vein, we have treated analyzing information by steps people go through in their minds, or by mathematical algorithms, without more, as essentially mental processes within the abstract-idea category.” *Id.* at 1354. Here, the limitations recited in claim 1 could be performed by a person using a pencil and paper, or with ordinary mental steps. *See id.* at 1355. “And we have recognized that merely presenting the results of abstract processes of collecting and analyzing information, without more (such as identifying a particular tool for presentation), is abstract as an ancillary part of such

collection and analysis.” *Id.* at 1354. “Here, the claims are clearly focused on the combination of those abstract-idea processes.” *Id.*; *see also Content Extraction and Transmission LLC v. Wells Fargo Bank, Nat’l Ass’n*, 776 F.3d 1343, 1347 (Fed. Cir. 2014) (determining claims directed to collecting, recognizing, and storing data in a computer memory to be directed to an abstract idea).

Regardless, Appellants argue that “the claims are not directed to a conventional activity, such as a bank activity, wherein the only modification is the addition of a computer. Instead, the claimed invention is directed to an entirely unconventional method of determining a suggested fuel price.” (Appeal Br. 7.)

We do not find this argument persuasive. While we agree with Appellants that the claims are directed to determining a fuel price, as noted above, the steps could be performed by a person with ordinary mental steps or using a pencil and paper. (*See* Final Action 8–9; *see also OIP Techs., Inc. v. Amazon.com, Inc.*, 788 F.3d 1359, 1363 (Fed. Cir. 2015) (discussing “the fundamental economic concept of offer-based price optimization through the use of generic-computer functions”).) To the extent Appellants’ argument is that because the steps are novel, the claim recites patent eligible subject matter, we disagree. “The ‘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).

Moreover, the limitations of claim 1 do not recite implementation details. Instead, they recite functional results to be achieved. In other

words, claim 1 does not recite “a particular way of programming or designing the software . . . , but instead merely claim[s] the resulting systems.” *Apple, Inc.*, 842 F.3d at 1241. “Indeed, the claim language here provides only a result-oriented solution, with insufficient detail for how a computer accomplishes it. Our law demands more.” *Intellectual Ventures I LLC v. Capital One Fin. Corp.*, 850 F.3d 1332, 1342 (Fed. Cir. 2017).

Nonetheless, Appellants seek to analogize claim 1 to the claims in *McRO, Inc. v. Bandai Namco Games Am. Inc.*, 837 F.3d 1299 (Fed. Cir. 2016). (Appeal Br. 9–11.) We disagree.

In *McRO*, the court determined that

the claimed improvement here is allowing computers to produce “accurate and realistic lip synchronization and facial expressions in animated characters” that previously could only be produced by human animators. As the district court correctly recognized, this computer automation is realized by improving the prior art through “the use of rules, rather than artists, to set the morph weights and transitions between phonemes.” The rules are limiting in that they define morph weight sets as a function of the timing of phoneme sub-sequences.

McRO, 837 F.3d at 1313 (citations omitted). Here, the asserted improvement is to a business method regarding determining fuel pricing for aircraft. Claim 1 refers to processors at only a high level of abstraction, e.g., “instructions executable by a processor.” (Claim 1.) Indeed, “without the computer[/processor] limitations nothing remains in the claim[] but the abstract idea.” *Bancorp Servs., L.L.C. v. Sun Life Assur. Co. of Canada (U.S.)*, 687 F.3d 1266, 1280 (Fed. Cir. 2012). In other words, unlike *McRO*, “[t]hese claims in substance [are] directed to nothing more than the performance of an abstract business practice . . . using a conventional

computer. Such claims are not patent-eligible.” *DDR Holdings, LLC v. Hotels.com, L.P.*, 773 F.3d 1245, 1256 (Fed. Cir. 2014).

In view of the above, we agree with the Examiner that claim 1 is directed to an abstract idea.

Step two of the *Alice* framework has been described “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.’” *Alice*, 134 S. Ct. at 2355 (citing *Mayo*, 566 U.S. at 72–73).

Taking the claim elements separately, the function performed by the computer at each step is purely conventional. Receiving data, retrieving data, analyzing data, and providing results are basic computer functions. In short, each step does no more than require a generic computer to perform routine computer functions.

Considered as an ordered combination, the instructions in Appellants’ claim add nothing that is not already present when the steps are considered separately. The claims do not, for example, purport to improve the functioning of a computer. Nor do they effect an improvement in any other technology or technical field. Instead, the claims at issue amount to nothing significantly more than an instruction to apply the abstract idea. That is not enough to transform an abstract idea into a patent-eligible invention. *Alice*, 134 S. Ct. at 2360; *see also* Final Action 9–10.

Moreover, “[i]t has been clear since *Alice* that a claimed invention’s use of the ineligible concept to which it is directed cannot supply the inventive concept that renders the invention ‘significantly more’ than that

ineligible concept.” *BSG Tech LLC v. BuySeasons, Inc.*, 899 F.3d 1281, 1290 (Fed. Cir. 2018).

Nonetheless, Appellants argue that “under the analysis used in [*BASCOM Global Internet Services, Inc. v. AT&T Mobility LLC*, 827 F.3d 1341 (Fed. Cir. 2016)], the ordered combination of elements that are arranged to produce an improvement in the field [of aviation] would amount to ‘significantly more.’” (Appeal Br. 12.)

In *BASCOM*, the court determined that “an inventive concept can be found in the non-conventional and non-generic arrangement of known, conventional pieces.” *BASCOM*, 827 F.3d at 1350. Specifically, “[t]he inventive concept described and claimed in the ’606 patent is the installation of a filtering tool at a specific location, remote from the end-users, with customizable filtering features specific to each end user.” *Id.* at 1350. The Federal Circuit determined that this “particular arrangement of elements is a technical improvement over prior art ways of filtering.” *Id.* Appellants do not indicate what element(s) in claim 1 correspond to, e.g., the “filtering tool at a specific location, remote from the end-users,” nor do Appellants indicate how the claimed arrangement of steps is a technical improvement over the prior art. Therefore, we do not find this argument persuasive.

In view of the above, we agree with the Examiner that claim 1 is directed to a judicial exception under § 101 without significantly more. Appellants do not present separate arguments for claim 2–11 and 13–19. (See Appeal Br. 12–13.) Therefore, claims 2–11 and 13–19 fall with claim 1. See 37 C.F.R. § 41.37(c)(1)(iv).

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DECISION

The Examiner's rejection of claims 1–11 and 13–19 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). *See* 37 C.F.R. § 1.136(a)(1)(iv).

AFFIRMED