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UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

Ex parte JAMES C. JOHNSON

Appeal 2019-002306
Application 11/687,009
Technology Center 3600

Before JOSEPH A. FISCHETTI, BIBHU R. MOHANTY, and
BRUCE T. WIEDER, *Administrative Patent Judges*.

WIEDER, *Administrative Patent Judge*.

DECISION ON APPEAL

Appellant¹ seeks review under 35 U.S.C. § 134 from the Examiner's final rejection of claims 2–9 and 11–18. We have jurisdiction under 35 U.S.C. § 6(b).

We AFFIRM.

¹ We use the word “Appellant” to refer to “applicant” as defined in 37 C.F.R. § 1.42. Appellant identifies the real party in interest as BGC PARTNERS, INC. (Appeal Br. 3.)

CLAIMED SUBJECT MATTER

Appellant's invention relates to reducing or eliminating "disadvantages and problems associated with previous techniques for disputing the processing of a trading order." (Spec. 3, ll. 2–5.)

Claims 2 and 11 are the independent claims on appeal. Claim 2 is illustrative.² It recites:

2. An apparatus comprising at least one computing device coupled over a network to a trading platform, the at least one computing device comprising:

at least one processor; and
a memory, the memory storing software thereon that when executed causes the processor to:

generate a trading order to transact a financial instrument;
store information related to the trading order in the memory;

communicate the trading order to the trading platform;
receive a confirmation message from the trading platform;
receive a selection of an option to initiate a dispute;
display a trading parameters section and an objection section on a graphical user interface;

display, in the objection section, at least one objection button comprising an incorrect trading parameters button, an improper order fill button, a technical problems button, or an other [sic] button;

detect a selection of the at least one objection button in the objection section;

in response to detecting the selection of the at least one objection button, communicate a dispute request to a governing entity over a trading order in the trading parameters section according to a respective function of the selected objection button; and

process the trading order.

² Claim 2 as shown on page 17 of the Appeal Brief is not identical to claim 2 as presented to the Examiner in the amendments of April 20, 2018, and as entered by the Examiner. We cite to claim 2 as entered.

REJECTION

Claims 2–9, and 11–18 are rejected under 35 U.S.C. § 101 as directed to a judicial exception without significantly more.

ANALYSIS

Appellant does not separately argue claims 2–9 and 11–18. We select claim 2 as representative. Claims 3–9 and 11–18 will stand or fall with claim 2. *See* 37 C.F.R. § 41.37(c)(1)(iv).

“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*, 573 U.S. 208, 216 (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*, 573 U.S. at 217.

Under the two-step framework, it must first be determined if “the claims at issue are directed to a patent-ineligible concept.” *Id.* at 218. 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 221 (internal quotation marks omitted) (citing *Mayo*, 566 U.S. at 72–73, 79).

With regard to step one of the *Alice* framework, we apply a “directed to” two-prong test to: 1) evaluate whether the claim recites a judicial exception, and 2) if the claim recites a judicial exception, evaluate whether the claim “appl[ies], rel[ies] on, or use[s] the judicial exception in a manner that imposes a meaningful limit on the judicial exception, such that the claim is more than a drafting effort designed to monopolize the judicial exception.” *See* USPTO, 2019 Revised Patent Subject Matter Eligibility Guidance, 84 Fed. Reg. 50, 54 (Jan. 7, 2019) (hereinafter “2019 Guidance”).

Here, the Examiner determines that claim 2 “disclose[s] a system for dispute data transfer in a distributed trading system that is used to trade items.” (Answer 7.) The Examiner also determines that the method implemented by the system “is a method of organizing human activity.” (*Id.*) The 2019 Guidance identifies “commercial or legal interactions (including agreements in the form of contracts; legal obligations; advertising, marketing or sales activities or behaviors; business relations)” as certain methods of organizing human activity, and a category of abstract ideas. (2019 Guidance at 52.)

Appellant argues that “the claims of the instant case clearly recite an improved user interface” (Appeal Br. 10), and that “reduc[ing] network disputes and thereby sav[ing] bandwidth . . . is an unequivocal . . . computer improvement” (*id.* at 12).

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 “directed to” inquiry . . . cannot simply ask whether the claims *involve* a patent-ineligible concept, because essentially every routinely patent-eligible claim involving physical products and actions *involves* a law of nature and/or natural phenomenon Rather, the “directed to” inquiry applies a stage-one filter to claims, considered in light of the specification, based on whether “their character as a whole is directed to excluded subject matter.” *Internet Patents Corp. v. Active Network, Inc.*, 790 F.3d 1343, 1346 (Fed. Cir. 2015).

Enfish, LLC v. Microsoft Corp., 822 F.3d 1327, 1335 (Fed. Cir. 2016). In other words, the first step of the *Alice* framework “asks whether the focus of the claims is on the specific asserted improvement in [the relevant technology] or, instead, on a process that qualifies as an ‘abstract idea’ for which computers are invoked merely as a tool.” *Id.* at 1335–36; *see also* 2019 Guidance at 54–55.

The Specification provides evidence as to what the claimed invention is directed. In this case, the Specification discloses that the invention relates to reducing or eliminating “disadvantages and problems associated with previous techniques for disputing the processing of a trading order.” (Spec. 3, ll. 2–5.) Claim 2 provides further evidence. Claim 2 recites “at least one processor; and a memory . . . storing software . . . to: generate a trading order,” “store information related to the trading order,” “communicate the trading order,” “receive a confirmation message,” “receive a selection of an option,” “display a trading parameters section and an objection section on a graphical user interface,” “display, in the objection section at least one objection button,” “detect a selection of the at least one

objection button,” “in response . . . , communicate a dispute request,” and “process the trading order.”

In short, claim 2 recites a generic processor, a generic memory, and a generic graphical user interface. (*See, e.g.*, Spec. 8, ll. 1–10; 9, ll. 9–16; 14, ll. 17–27.) The memory contains software for generating data (a trading order), storing data, communicating data, receiving data, displaying data, detecting input, communicating data, and processing data. The claim does not recite technological implementation details for any of the steps. Claim 2 merely recites functional results to be achieved by any means, e.g., claim 2 does not recite how the trading order is generated, how the trading order is communicated, how the graphical user interface displays the trading parameters and objection sections, how the button selection is detected, how the dispute request is communicated, or how the trading order is processed. In other words, claim 2 does not recite any specific asserted improvement to computer technology.

In cases involving software innovations, such as we have here, the inquiry as to whether the claims are directed to an abstract idea “often turns on whether the claims focus on ‘the specific asserted improvement in computer capabilities ... or, instead, on a process that qualifies as an “abstract idea” for which computers are invoked merely as a tool.’” *Finjan, Inc. v. Blue Coat Sys., Inc.*, 879 F.3d 1299, 1303 (Fed. Cir. 2018) (quoting *Enfish, LLC*, 822 F.3d at 1335–36). Here, the processor, memory, and graphical user interface are invoked merely as tools.

Appellant argues:

As with the claims in *Core Wireless*, the claims of the instant case clearly recite an improved user interface with precise language delimiting the type of data to be displayed (e.g.,

“display a trading parameters section and an objection section on a graphical user interface” and “display in the objection section at least one objection button comprising an incorrect trading parameters button, an improper order fill button, a technical problems button, or another button.” As will be discussed further below . . . , the claimed GUI [(graphical user interface)] structure increases the efficiency of the computer by reducing bandwidth. Accordingly, the claims clearly meet the *Core Wireless* guidelines

(Appeal Br. 10 (emphasis omitted) (citing Spec. 3, l. 30–4, l. 12).)

We do not find this argument persuasive. Claim 2 does not recite “a particular way of programming or designing the software . . . , but instead, merely claim[s] the resulting system[.]” *Apple, Inc. v. Ameranth, Inc.*, 842 F.3d 1229, 1241 (Fed. Cir. 2016). In other words, claim 2 simply recites desired results. Claim 2 is “focused on providing information to [the user] . . . , not on improving computers or technology.” *Trading Techs. Int’l, Inc. v. IBG LLC*, 921 F.3d 1378, 1384 (Fed. Cir. 2019). “Like *Electric Power*, the purported advance ‘is a process of gathering and analyzing information of a specified content, then displaying the results, and not any particular assertedly inventive technology for performing those functions.’ 830 F.3d at 1354. We thus conclude that the claim[is] directed to an abstract idea.” *Id.* at 1385.

Nor do we find persuasive Appellant’s argument that “the claimed GUI structure increases the efficiency of the computer by reducing bandwidth.” (See Appeal Br. 10.) The portion of Appellant’s Specification that Appellant relies on recites that “the dispute manager may provide a relatively quick response to a trading order dispute request. In some situations, the quick response may yield a speedy resolution to a trading

order dispute. Such a resolution of trading order disputes with [sic] reduce network disputes and thereby save bandwidth.” (Spec. 4, ll. 7–12.)

“Even if we accept [Appellant’s] assertions, the claimed invention merely improves the abstract concept . . . using a computer as a tool. This is not what the Supreme Court meant by improving the functioning of the computer itself nor is it consistent with [the Federal Circuit’s] precedent applying this concept.” *Customedia Techs., LLC v. Dish Network Corp.*, No. 2018-2239, slip op. at 7 (Fed. Cir. Mar. 6, 2020).

In view of the above, claim 2 “do[es] not improve the functioning of the computer, make it operate more efficiently, or solve any technological problem. Instead, [it] recite[s] a purportedly new arrangement of generic information that assists traders in processing information more quickly.” *Trading Techs. Int’l, Inc. v. IBG LLC*, 921 F.3d 1084, 1093 (Fed. Cir. 2019). The Federal Circuit has concluded that such claims are directed to an abstract idea. *Id.* By contrast, in *Core Wireless Licensing S.A.R.L. v. LG Elecs., Inc.*, 880 F.3d 1356 (Fed. Cir. 2018), the court determined that “[t]he asserted claims in this case are directed to an improved user interface for computing devices,” that the claim “limitations disclose a specific manner of displaying a limited set of information to the user, rather than using conventional user interface methods,” and that “[t]he disclosed invention improves the efficiency of using the electronic device.” *Id.* at 1362–63. The court determined that the claims in *Core Wireless* were not directed to an abstract idea. *Id.*

“As many cases make clear, even 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.” *SAP Am., Inc. v. InvestPic, LLC*, 898 F.3d 1161, 1168 (Fed. Cir. 2018). Moreover, the “character of [the] information simply invokes a separate category of abstract ideas.” *Id.*

In view of the above, we determine that claim 2 is directed to “disputing the processing of a trading order.” (See Spec. 3, ll. 2–5.) In other words, claim 2 is directed to commercial or legal interactions, and, thus, an abstract idea, characterized as being directed to certain methods of organizing human activity. (See 2019 Guidance at 52.) This is in accord with the Examiner’s determination. (See Answer 7.)

Additionally, we do not see how the recitation of a generic processor, memory, and graphical user interface, even in conjunction with the recited functions, “ensure[s] ‘that the [claim] is more than a drafting effort designed to monopolize the [abstract idea].’” See *Alice*, 573 U.S. at 221 (second and third brackets in original) (quoting *Mayo*, 566 U.S. at 77).

Nor do we find any indication in the Specification that the claimed invention effects a transformation or reduction of a particular article to a different state or thing. Nor do we find anything of record that attributes an improvement in computer technology or functionality to the claimed invention or that otherwise indicates that the claimed invention “appl[ies], rel[ies] on, or use[s] the judicial exception in a manner that imposes a meaningful limit on the judicial exception, such that the claim is more than a drafting effort designed to monopolize the judicial exception.” (See 2019 Guidance at 54–55.)

Thus, under prong one of the two prong test in the 2019 Guidance, claim 2 recites an abstract idea; and, under prong two, additional elements in claim 2 do not “apply, rely on, or use the judicial exception in a manner that

imposes a meaningful limit on the judicial exception, such that the claim is more than a drafting effort designed to monopolize the judicial exception.” (See 2019 Guidance at 54.) As such, under step one of the *Alice* framework, the claims are directed to an abstract idea, and we move to step two.

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*, 573 U.S. at 217–18 (brackets in original) (quoting *Mayo*, 566 U.S. at 72–73). Under step two, we examine, *inter alia*, whether a claim element or combination of elements “[a]dds a specific limitation or combination of limitations that are not well-understood, routine, conventional activity in the field, which is indicative that an inventive concept may be present.” (2019 Guidance at 56.)

Here, the question is whether the steps of generating data, storing data, communicating data, receiving data, displaying data, detecting input, and processing data are well-understood, routine and conventional.

The Examiner finds that “[a]lthough a computer acts as the intermediary in the claimed method, the claims do no more than implement the abstract idea[] recited *supra*. All of these computer functions are ‘well understood, routine, conventional activities’ previously known in the industry.” (Final Action 5 (footnote omitted).³)

³ In the footnote, the Examiner cites to a Federal Circuit slip opinion for Case No. 2016-1077 issued on March 7, 2017. The case name recited by the Examiner is not correct. Case No. 2016-1077 issued on March 7, 2017, is *Intellectual Ventures I LLC v. Capital One Financial Corp.*, 850 F.3d 1332 (Fed. Cir. 2017).

Appellant argues that in view of *Berkheimer v. HP Inc.*, 881 F.3d 1360 (Fed. Cir. 2018), and “Formulating a Subject Matter Eligibility Rejection and Evaluating the Applicant’s Response to a Subject Matter Eligibility Rejection,” Memorandum, Robert W. Bahr, Deputy Commissioner for Patent Examination Policy, May 4, 2016, the conclusory analysis in the Final Action is insufficient. (Appeal Br. 14.) We do not find this argument persuasive.

Generating data, storing data, communicating data, receiving data, displaying data, detecting input, and processing data are all routine and conventional functions for a computer processor and were previously known to the industry. *See Elec. Power Grp.*, 830 F.3d at 1356 (The claims “do not include any requirement for performing the claimed functions of gathering, analyzing, and displaying in real time by use of anything but entirely conventional, generic technology. The claims therefore do not state an arguably inventive concept”); *see also In re Katz Interactive Call Processing Patent Litig.*, 639 F.3d 1303, 1316 (Fed. Cir. 2011) (“Absent a possible narrower construction of the terms ‘processing,’ ‘receiving,’ and ‘storing,’ . . . those functions can be achieved by any general purpose computer without special programming.”). Moreover, like claim 2 at issue here, the claims at issue in *Intellectual Ventures I*, the case cited by the Examiner (*see* Final Action 5; *see also* Answer 14), “recite both a generic computer element—a processor—and a series of generic computer ‘components’ that merely restate their individual functions—i.e., organizing, mapping, identifying, defining detecting, and modifying. That is to say, they merely describe the functions of the abstract idea, without particularity. This is simply not enough under step two.” *Intellectual Ventures I LLC*, 850 F.3d

at 1341. In sum, taking the claim elements separately, the functions performed in claim 2 by the generic processor, generic memory, and generic graphical user interface are purely routine and conventional.

Considered as an ordered combination, the generic computer components of Appellant's claimed invention add nothing that is not already present when the limitations are considered separately. For example, claim 2 does not, as discussed above, purport to improve the functioning of the computer components themselves. Nor does it effect an improvement in any other technology or technical field. Instead, claim 2 amounts to nothing significantly more than an instruction to apply the abstract idea using generic computer components performing routine computer functions. (*See* Final Action 5; *see also* Answer 14.) That is not enough to transform an abstract idea into a patent-eligible invention. *See Alice*, 573 U.S. at 225–26.

Appellant's other arguments, including those directed to now-superseded USPTO guidance, have been considered but are not persuasive of error. (*See* 2019 Guidance at 51 (“Eligibility-related guidance issued prior to the Ninth Edition, R–08.2017, of the MPEP (published Jan. 2018) should not be relied upon.”).)

In view of the above, we are not persuaded that the Examiner erred in rejecting claim 2. Claims 3–9 and 11–18 fall with claim 2. *See* 37 C.F.R. § 41.37(c)(1)(iv).

CONCLUSION

The Examiner's rejection of claims 2-9, and 11-18 under 35 U.S.C. § 101 is affirmed.

Specifically:

Claims Rejected	35 U.S.C. §	Reference(s)/Basis	Affirmed	Reversed
2-9, 11-18	101	eligibility	2-9, 11-18	

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