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UNITED STATES PATENT AND TRADEMARK OFFICE

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BEFORE THE PATENT TRIAL AND APPEAL BOARD

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*Ex parte* STUART FRASER, ANDREW C. GILBERT, PHILIP M. GINSBERG, GIENN D. KIRWIN, HOWARD W. LUTNICK, and MICHAEL E. WILLIAMS

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Appeal 2018-008888  
Application 13/550,011  
Technology Center 3600

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Before ROBERT E. NAPPI, ST. JOHN COURTENAY III, and JOYCE CRAIG, *Administrative Patent Judges*.

CRAIG, *Administrative Patent Judge*.

DECISION ON APPEAL

STATEMENT OF THE CASE

Pursuant to 35 U.S.C. § 134(a), Appellant<sup>1</sup> appeals from the Examiner's decision to reject claims 22–25 and 38–53.<sup>2</sup> *See* Final Act. 1.

We have jurisdiction under 35 U.S.C. § 6(b).

We affirm.

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<sup>1</sup> 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, L.P. Appeal Br. 1.

<sup>2</sup> Claims 1–21 and 26–37 were previously cancelled. Appeal Br. 6.

### CLAIMED SUBJECT MATTER

The claims are directed to systems and methods for trading. Spec. ¶ 2.  
Claim 22, reproduced below, is illustrative of the claimed subject matter:

22. A method, comprising:

detecting, by at least one processor from a graphical user interface of a first workstation, a presence of a first data source including data representing a queue having a first bid or a first offer;

detecting, by at least one processor from the first workstation, instructions defining conditions upon which a second data source including data representing a queue having a second bid or a second offer is to be automatically generated on behalf of the first workstation;

detecting, by at least one processor from a graphical user interface of a second workstation, a hit of the first bid thereby accepting the first bid or a lift of the first offer thereby accepting the first offer, the hit of the first bid or the lift of the first offer resulting in a trade between the first workstation and the second workstation; and

responsive to the trade between the first workstation and the second workstation resulting from the hit of the first bid or the lift of the first offer, automatically generating, by at least one processor, the second bid or offer for the first workstation based upon the instructions.

### REJECTIONS

Claims 22–25 and 38–53 stand rejected under 35 U.S.C. § 101 because the claimed invention is directed to patent-ineligible subject matter. Final Act. 2–3.

Claims 22–25 and 38–53 stand rejected under 35 U.S.C. § 112, first paragraph, as lacking written description support. Final Act. 3–4.

## ANALYSIS

### *Rejection of Claims Under 35 U.S.C. § 112, First Paragraph*

Claim 22 recites, in part, “detecting, by at least one processor from a graphical user interface of a first workstation, a presence” and “detecting, by at least one processor from a graphical user interface of a second workstation, a hit of the first.” Appeal Br 15 (Claims App’x).

The Examiner rejected claims 22–25 and 38–53 as failing to comply with the written-description requirement of § 112 because the originally filed Specification lacks support for the limitations set forth above. Final Act. 4.

Appellant argues that one of ordinary skill in the art would have understood from Figure 17 and paragraph 41 of the Specification that “the GUI being executed by the processor would detect the ‘presence of a first data source . . . having a first bid or a first offer,’” as recited in claim 22. Appeal Br. 12 (emphasis omitted). Appellant further argues that an artisan of ordinary skill would have understood that paragraph 72 of the Specification provides support for the limitation “detecting, by at least one processor from a graphical user interface of a second workstation, a hit of the first bid thereby accepting the first bid or a lift of the first offer,” as recited in claim 22. *Id.* Appellant did not reply substantively to the Examiner’s finding that “[h]aving the processor detect such information from the interface is not supported in the specification.” *See* Ans. 5; *see also* Appeal Br. 12

According to the Examiner, there is a fundamental difference between “detecting, by a processor from a graphical user interface,” as claim 22 requires, and “detecting, by a graphical user interface from a processor,” as Appellant describes the support in the Specification. Ans. 5. The Examiner

found that “[h]aving the processor detect such information from the interface is not supported in the specification.” *Id.*

“The test for the sufficiency of the written description ‘is whether the disclosure of the application relied upon reasonably conveys to those skilled in the art that the inventor had possession of the claimed subject matter as of the filing date.’” *Vasudevan Software, Inc, v. MicroStrategy, Inc.*, 782 F.3d 671, 682 (Fed. Cir. 2015) (citing *Ariad Pharms., Inc, v. Eli Lilly & Co.*, 598 F.3d 1336, 1351 (Fed. Cir. 2010) (en banc)).

Appellant has persuaded us that the Examiner erred. The Specification describes that “information about trading progress and participants is provided to each participant at a workstation in the form of one or more selectively configured screen displays.” Spec. ¶¶ 40–41. Paragraph 72 of the Specification describes a “process” performing steps related to the processing of a bid/offer. An artisan of ordinary skill, reading Figure 17 and paragraphs 40, 41, and 72 of Appellant’s Specification, would have appreciated that a process makes determinations based on information from a graphical user interface using a processor. Thus, the Specification reasonably conveys to those skilled in the art that the inventor had possession of the claimed subject matter as of the filing date.

For these reasons, on the record before us, we are persuaded the Examiner erred, and we reverse the written description rejection under 35 U.S.C. § 112, first paragraph, of independent claim 22 and grouped claims 23–25 and 38–53.

*Rejection of Claims Under 35 U.S.C. § 101*

Appellant argues that the Examiner’s rejection of claims 22–25 and 38–53 under 35 U.S.C. § 101 is in error. To the extent Appellant has not advanced separate, substantive arguments for particular claims, or other issues, such arguments are waived. 37 C.F.R. § 41.37(c)(1)(iv) (2017). Appellant argues claims 22–25 and 38–53 as a group. Appeal Br. 6. Given our discretion under 37 C.F.R. § 41.37(c)(1)(iv), we decide the § 101 rejection of claims 22–25 and 38–53 based on representative claim 22.

Legal Standard

“Whether a claim is drawn to patent-eligible subject matter is an issue of law that we review de novo.” *SiRF Tech., Inc. v. Int’l Trade Comm’n*, 601 F.3d 1319, 1331 (Fed. Cir. 2010).

The Supreme Court’s two-step framework guides our analysis of patent eligibility under 35 U.S.C. § 101. *Alice Corp. Pty. Ltd. v. CLS Bank Int’l*, 573 U.S. 208, 217 (2014). In addition, the Office published revised guidance for evaluating subject matter eligibility under 35 U.S.C. § 101, specifically with respect to applying the *Alice* framework. USPTO, 2019 Revised Patent Subject Matter Eligibility Guidance, 84 Fed. Reg. 50 (Jan. 7, 2019) (“Office Guidance”). If a claim falls within one of the statutory categories of patent eligibility (i.e., a process, machine, manufacture, or composition of matter) then the first inquiry is whether the claim is directed to one of the judicially recognized exceptions (i.e., a law of nature, a natural phenomenon, or an abstract idea). *Alice*, 573 U.S. at 217. As part of this inquiry, we must “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 Tex., LLC v.*

*DIRECTV, LLC*, 838 F.3d 1253, 1257 (Fed. Cir. 2016). Per Office Guidance, this first inquiry has two prongs of analysis (i) does the claim recite a judicial exception (e.g., an abstract idea), and (ii) if so, is the judicial exception integrated into a practical application. 84 Fed. Reg. at 54. Under the Office Guidance, if the judicial exception is integrated into a practical application, *see infra*, the claim is patent eligible under § 101. 84 Fed. Reg. at 54–55. If the claim is directed to a judicial exception (i.e., recites a judicial exception and does not integrate the exception into a practical application), the next step is to determine whether any element, or combination of elements, amounts to significantly more than the judicial exception. *Alice*, 573 U.S. at 217; 84 Fed. Reg. at 56. If the claim is “directed to” an abstract idea, we turn to the second step of the *Alice* and *Mayo* framework, where “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.” *Alice*, 573 U.S. at 221 (citation omitted).

To summarize, under the current Office Guidance, we first look to whether the claim recites:

(1) any judicial exceptions, including certain groupings of abstract ideas (i.e., mathematical concepts, certain methods of organizing human activity such as a fundamental economic practice, or mental processes); and

(2) additional elements that integrate the judicial exception into a practical application (*see* Manual for Patent Examining Procedure (“MPEP”) §§ 2106.05(a)–(c), (e)–(h) (9th Ed. Rev. 08.2017 (Jan. 2018))).

Only if a claim (1) recites a judicial exception and (2) does not integrate that exception into a practical application, do we then look to whether the claim:

(3) adds a specific limitation beyond the judicial exception that is not “well-understood, routine, conventional” in the field (*see* MPEP § 2106.05(d)); or

(4) simply appends well-understood, routine, conventional activities previously known to the industry, specified at a high level of generality, to the judicial exception.

*See* Office Guidance.

### Step 1

Claim 22, as a method claim, falls within the process category of § 101. *See* Office Guidance, 84 Fed. Reg. at 53–54 (citing MPEP §§ 2106.03, 2106.06).

### Step 2A(i): Does the Claim Recite a Judicial Exception?

The Examiner determined that claim 22 is directed to “trading between certain conditions or instructions,” which is a certain method of organizing human activity, and thus an abstract idea. Final Act. 2.

Appellant describes the present invention as relating to “managed trading of select classes of assets, especially currencies and options, but also securities, financial instruments, commodities, and their derivatives in accordance with specific protocols in an auction format with controlled sequences of auction events.” Spec. ¶ 2.

Consistent with Appellant’s description of the claims, we agree with the Examiner that the claims at least recite certain methods of organizing human activity, specifically an interface for a fundamental economic practice of trading. *See* Office Guidance, 84 Fed. Reg. at 52. The recent precedential decision in *Trading Technologies International, Inc. v. IBG*

*LLC*, 921 F.3d 1084 (Fed. Cir. 2019), is instructive. That case involved, in part, “a user interface for an electronic trading system that allows a remote trader to view trends in the orders for an item, and provides the trading information in an easy to see and interpret graphical format.” *Id.* at 1087 (quotation omitted). Under *Alice* Step 1, the Federal Circuit agreed with the Board that the claims were “directed to the abstract idea of graphing (or displaying) bids and offers to assist a trader to make an order” and “placing an order based on displayed market information is a fundamental economic practice.” *Id.* at 1092 (quotation omitted). Given that the Federal Circuit held the claims for a trading interface in *Trading Technologies v. IBG* were directed to an abstract idea, the claims for a trading interface here at least recite an abstract idea that is fairly characterized as a fundamental economic practice, which falls into the “certain methods of organizing human activity” category of abstract ideas. *See* 84 Fed. Reg. at 52.

Appellant argues that the Examiner erred in oversimplifying the claims “by looking at them generally without any analysis of the specific features recited in the claims.” Appeal Br. 9 (emphasis omitted). In *Trading Technologies v. IBG* the Federal Circuit stated, “[t]he fact that the claims add a degree of particularity as to how an order is placed in this case does not impact our analysis at step one.” 921 F.3d at 1092. The same is true here.

Because we agree with the Examiner that the claim recites an abstract idea, we proceed to Prong Two of Step 2A to determine if the idea is integrated into a practical application, in which case the claim as a whole would not be “directed to” merely an abstract idea.

Step 2A(ii): Judicial Exception Integrated into a Practical Application?

Because we determined that claim 22 recites a patent-ineligible concept, we next determine whether the recited judicial exception is integrated into a practical application of that exception by: (a) identifying whether there are any additional elements recited in the claim beyond the judicial exception(s); and (b) evaluating those additional elements individually and in combination to determine whether they integrate the exception into a practical application.

We use the term “additional elements” for claim features, limitations, or steps that the claim recites beyond the identified judicial exception. *See* Office Guidance, 84 Fed. Reg. at 55 n.24. In claim 22, the additional elements include the recited “processor” and “workstation.” Final Act. 3.

The Examiner determined that none of the additional limitations is sufficient to amount to significantly more than the judicial exception because the “recited generic processor components perform no more than their basic processor functions.” Final Act. 3.

Appellant argues that the claims amount to an improvement in computer performance. Appeal Br. 8. Appellant argues that claim 22 improves network communication between a first workstation and a second workstation with respective graphical user interfaces that may help reduce the number of transactions over the network. That is, the claimed subject matter is drawn to graphical user interfaces that provide advantages over the prior art systems including improving the efficiency of electronic devices.

*Id.*(emphasis omitted). In particular, Appellant argues that the Specification’s description of a touch screen, interactive features, and the automatic translation of date indicators improves the graphical user interface

by “improving specific structures and coordinated functionality of the graphical user interface and by enabling a variety of inputs and outputs via networked communication.” Appeal Br. 8 (emphasis omitted). According to Appellant, “these features at least help reduce computer workload including computer resources such as memory resources, processor resources, and network resources.” *Id.* (emphasis omitted).

Appellant’s arguments are not persuasive. Appellant has not shown that claim 22 includes additional elements that improve the underlying computer, or other technology. The fact that the steps can be performed more efficiently via a computer does not materially alter the patent eligibility of the claimed subject matter. *See Bancorp Servs., L.L.C. v. Sun Life Assurance Co. of Can. (U.S.)*, 687 F.3d 1266, 1278 (Fed. Cir. 2012). *See Intellectual Ventures I LLC v. Capital One Bank (USA)*, 792 F.3d 1363, 1370 (Fed. Cir. 2015) (“[M]erely adding computer functionality to increase the speed or efficiency of the process does not confer patent eligibility on an otherwise abstract idea.”); *cf. Trading Techs. Int’l, Inc. v. IBG LLC*, 921 F.3d 1084, 1090 (Fed. Cir. 2019) (“This invention makes the trader faster and more efficient, not the computer. This is not a technical solution to a technical problem.”). The features Appellant cites in the Specification are not recited in claim 22.

Appellant’s reliance on *Core Wireless Licensing S.A.R.L. v. LG Electronics Inc.*, 880 F.3d 1356 (Fed. Cir. 2018) is unavailing. *See* Appeal Br. 7. In *Core Wireless*, the court stated that “[t]he disclosed invention improves the efficiency of using the electronic device[s].” *Core Wireless*, 880 F.3d at 1363. However, the court also explained that “[w]e also ask whether the claims are directed to a specific improvement in the capabilities

of computing devices” (*id.* at 1361), and then determine that “the claims are directed to an improvement in the functioning of computers” (*id.* at 1363). Thus, in *Core Wireless*, the improved efficiency of using the electronic devices was related to an identified improvement in the functioning of computers. The court found that the claims were directed to an improved user interface and not the abstract concept of an index because the claim limitations “disclose a specific manner of displaying a limited set of information to the user, rather than using conventional user interface methods to display a generic index on a computer.” *Id.*

Here, there are no additional elements or other limitations directed to how the user interacts with the displayed data. Rather than presenting a specific interface and implementation for navigating, as in *Core Wireless*, Appellant’s claimed invention lacks a specific technical improvement in functionality.

Appellant further argues that “the Examiner is unable to assert a prior art reference,” which demonstrates that the claims recite a set of rules that were not previously performable by the computer. Appeal Br. 10 (emphasis omitted).

Appellant’s argument is not persuasive. 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). Our reviewing court further guides that “[e]ligibility and novelty are separate inquiries.” *Two-Way Media Ltd. v. Comcast Cable Commc’ns, LLC*, 874 F.3d 1329, 1340 (Fed. Cir. 2017); *see also Affinity Labs of Tex., LLC v. DIRECTV, LLC*, 838 F.3d 1253, 1263 (Fed. Cir. 2016)

(holding that “[e]ven assuming” that a particular claimed feature was novel does not “avoid the problem of abstractness”).

Considering claim 1 as a whole, then, Appellant’s invention lacks a technical solution to a technical problem. Claim 1 merely uses instructions to implement the abstract idea on a computer or, alternatively, merely uses a computer as a tool to perform the abstract idea. Here, the additional limitation(s) do not integrate the judicial exception into a practical application. More particularly, the claims do not recite (i) an improvement to the functionality of a computer or other technology or technical field (*see* MPEP § 2106.05(a)); (ii) a “particular machine” to apply or use the judicial exception (*see* MPEP § 2106.05(b)); (iii) a particular transformation of an article to a different thing or state (*see* MPEP § 2106.05(c)); or (iv) any other meaningful limitation (*see* MPEP § 2106.05(e)). *See* 84 Fed. Reg. at 55. Rather, claim 1 recites an abstract ideas as identified in Step 2A(i), *supra*, and none of the limitations integrates the judicial exception into a practical application.

Therefore, because the abstract idea is not integrated into a practical application, we conclude that the claim is directed to the judicial exception.

Step 2B — “Inventive Concept” or “Significantly More”

If the claims are directed to a patent-ineligible concept, as we conclude above, we proceed to the “inventive concept” step. For Step 2B we must “look with more specificity at what the claim elements add, in order to determine ‘whether they identify an “inventive concept” in the application of the ineligible subject matter’ to which the claim is directed.” *Affinity Labs of Texas, LLC v. DIRECTV, LLC*, 838 F.3d 1253, 1258 (Fed. Cir. 2016) (quoting *Elec. Power Grp., LLC v. Alstom S.A.*, 830 F.3d 1350, 1353 (Fed.

Cir. 2016)). We look to see whether there are any “additional features” in the claims that constitute an “inventive concept,” thereby rendering the claims eligible for patenting even if they are directed to an abstract idea. *Alice*, 573 U.S. at 221. Those “additional features” must be more than “well-understood, routine, conventional activity.” *Mayo*, 566 U.S. at 79.

Considering the claim elements individually and as an ordered combination, the Examiner determined that the additional elements in claim 22 amount to a well-understood, routine, and conventional limitation that amounts to mere instructions to implement the abstract idea on a computer. Appeal Br. 3.

Appellant does not direct our attention to anything in the Specification that indicates the processor and workstation perform anything other than well-understood, routine, and conventional functions. *See buySAFE, Inc. v. Google, Inc.*, 765 F.3d 1350, 1355 (Fed. Cir. 2014) (“That a computer receives and sends the information over a network—with no further specification—is not even arguably inventive”); *In re TLI Commc’ns LLC Patent Litig.*, 823 F.3d 607, 614 (Fed. Cir. 2016) (server that receives data, extracts classification information from the received data, and stores the digital images insufficient to add an inventive concept); *Alice*, 573 U.S. at 225–26 (receiving, storing, sending information over networks insufficient to add an inventive concept).

The Specification describes the recited “workstation” in general terms. *See, e.g.*, Spec. ¶ 31 (“Workstations 202 and 218 may be any suitable means for presenting data and, in preferred embodiments, accepting participant input.”). Although the Specification does not describe a processor, it describes a server in general terms. Spec. ¶ 32 (“Server 206

may be any suitable computer or server, such as a network or Internet server.”).

Because the Specification describes the additional elements in general terms, without describing the particulars, we conclude the claim limitations may be broadly but reasonably construed as reciting conventional computer components and techniques, particularly in light of Appellant’s Specification, as cited above. *See Berkheimer Memo*<sup>3</sup> § III.A.1; Spec. ¶¶ 31–32. We conclude that claim 22 does not have an inventive concept because the claim, in essence, merely recites various computer-based elements along with no more than mere instructions to implement the identified abstract idea using the computer-based elements.

Because the claims fail under both the Step 2A and Step 2B analyses, we sustain the Examiner’s § 101 rejection of independent claim 22 and grouped claims 23–25 and 38–53, not argued separately with particularity.

## CONCLUSION

We affirm the decision of the Examiner rejecting claims 22–25 and 38–53 under 35 U.S.C. § 101 as directed to a judicial exception without significantly more.

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<sup>3</sup> “Changes in Examination Procedure Pertaining to Subject Matter Eligibility, Recent Subject Matter Eligibility Decision (*Berkheimer v. HP, Inc.*)” at 3 (Apr. 19, 2018) (explaining that a specification that describes additional elements “in a manner that indicates that the additional elements are sufficiently well-known that the specification does not need to describe the particulars of such additional elements to satisfy 35 U.S.C. § 112(a)” can show that the elements are well understood, routine, and conventional).

We reverse the decision of the Examiner rejecting claims 22–25 and 38–53 under 35 U.S.C. § 112, first paragraph, as lacking written description support.

Because we affirm at least one ground of rejection with respect to each claim on appeal, the Examiner’s decision rejecting claims 22–25 and 38–53 is affirmed. *See* 37 C.F.R. § 41.50(a)(1).

#### DECISION SUMMARY

<b>Claims Rejected</b>	<b>35 U.S.C. §</b>	<b>Reference(s)/Basis</b>	<b>Affirmed</b>	<b>Reversed</b>
22–25, 38–53	112, first paragraph	Written Description		22–25, 38–53
22–25, 38–53	101	Eligibility	22–25, 38–53	
<b>Overall Outcome</b>			22–25, 38–53	

#### TIME PERIOD FOR RESPONSE

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**