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EXAMINER

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UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

Ex parte MATTHEW W. CLAUS, JAMES R. DRISCOLL,
GREGORY P. MANNING, and JOSEPH C. NOVIELLO

Appeal 2017-000589
Application 13/621,231¹
Technology Center 3600

Before MURRIEL E. CRAWFORD, HUBERT C. LORIN, and
MATTHEW S. MEYERS, *Administrative Patent Judges*.

LORIN, *Administrative Patent Judge*.

DECISION ON APPEAL
STATEMENT OF THE CASE

Matthew W. Claus et al. (“Appellants”) seek our review under
35 U.S.C. § 134(a) from the Final Rejection of claims 1–11, 13–18, 37, and
38. We have jurisdiction under 35 U.S.C. § 6(b).²

SUMMARY OF DECISION

We AFFIRM.

¹ The Appellants identify BGC Partners, Inc. as the real party in interest.
App. Br. 2.

² The Appellants elected to waive their Request for Oral Hearing.

THE INVENTION

Claim 13, reproduced below, is illustrative of the subject matter on appeal.

13. A method for processing a composite trading order, comprising:

causing to be displayed on a display device, by at least one computer processor, a composite value representing a weighted quantity associated with a plurality of different but related trading products that are currently available to trade in a plurality of market centers; and

receiving, by the at least one computer processor, at least one input representing a composite trading order that could be satisfied by a plurality of quantities of the plurality of trading products, wherein:

the plurality of quantities of the plurality of trading products are collectively substantially equivalent to one another in at least one performance metric;

the composite trading order corresponds to at least a portion of the composite value such that satisfying the composite trading order would satisfy the at least portion of the composite value;

the at least one input comprises a quantity that is equal to at least a portion of the weighted quantity;

the at least one input does not identify any specific one of the plurality of trading products but is usable to generate at least two constituent trading orders for quantities of one or more of the plurality of trading products that, when filled, combine to satisfy the composite trading order; and

the at least two constituent trading orders comprise at least one of the plurality of quantities of the plurality of trading products.

THE REJECTION

The following rejection is before us for review:

Claims 1–11, 13–18, 37, and 38 are rejected under 35 U.S.C. § 101 as being directed to judicially-expected subject matter.

ISSUE

Did the Examiner err in rejecting claims 1–11, 13–18, 37, and 38 under 35 U.S.C. § 101 as being directed to judicially-expected subject matter.

ANALYSIS

The Appellants argued these claims in the “**First Group**.” *See* App. Br. 6. We select claim 13 as the representative claim for this group (it is reproduced at page 9), and the remaining claims 1–11, 14–18, 37, and 38 stand or fall with claim 13. 37 C.F.R. § 41.37(c)(1)(iv). We are cognizant of the “**Second**” through “**Nineteenth**” groups whereby each claim is separately mentioned. App. Br. 14-16 (e.g., claim 13 is also addressed in the “**Second Group**” (App. Br. 14: “The same or similar arguments to those presented above for independent claim 1 similarly apply to independent claim 13,”)). However, as we repeat below, the discussion relative these other “**Groups**” do little more than mention each claim and then rely on the arguments challenging the patent-ineligibility of claim 1. Claim 13, which is a method claim, parallels claim 1, which is an apparatus claim. Claim 1 is no different from claim 13 in substance because it recites a handful of generic computer components configured to implement the method of claim 13.

Alice Corp. Pty. Ltd. v. CLS Bank Int'l, 134 S. Ct. 2347 (2014) identifies a two-step framework for determining whether claimed subject matter is judicially-excepted from patent eligibility under §101.

According to *Alice* step one, “[w]e must first determine whether the claims at issue are directed to a patent-ineligible concept,” such as an abstract idea. *Id.* at 2355.

In that regard, the Examiner determined that “[c]laims 1-11, 13-18 and 37-39 are directed to a series of steps instructing how to process a composite trading order which is a method of organizing human activities and a fundamental economic practice long prevalent in the history of commerce.” Final Act. 2.

The Appellants argue that “[t]he Office Action fails to identify even a single specific recitation that recites the ‘steps instructing how to process a composite trading order,’” App. Br. 7. From a plain reading of the claim, we see it recited in the preamble (“method for processing a composite trading order”) followed by the steps of “causing to be displayed . . . a composite value” and “receiving . . . at least one input.” *See Two-Way Media Ltd. v. Comcast Cable Communications, LLC*, 874 F.3d 1329, 1340 (Fed. Cir. 2017) (“First, we see no error here in the district court citing to the preamble in its review of whether the claims are directed to an abstract idea. *See, e.g., Bascom Global Internet Servs., Inc. v. AT&T Mobility LLC*, 827 F.3d 1341, 1348 (Fed. Cir. 2016) (citing preamble for distillation of abstract idea). The district court's inquiry centered on determining the ‘focus’ of the claims, and was thus in accord with our precedent. *E.g., Elec. Power Grp. [LLC v. Alstom S.A.]*, 830 F.3d 1350, 1353 (Fed. Cir. 2016).”)

The Appellants further argue that “[t]he Office Action also fails to establish that the alleged abstract idea of ‘steps instructing how to process a composite trading order’ is, in fact, abstract.” App. Br. 7. In that regard, “the decisional mechanism courts now apply [to help answer that question] 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.” *Amdocs (Israel) Ltd. v. Openet Telecom, Inc.*, 841 F.3d 1288, 1294 (Fed. Cir. 2016). In accord with that mechanism, *Int’l Securities Exchange, LLC v. Chicago Bd. Options Exchange, Inc.*, 2015 WL 930204 (PTAB Mar. 2, 2015), *aff’d*, 640 Fed. App’x 986 (Mem) (Fed. Cir. 2016) is one such case. The claims involved therein are similar³ and were determined to be patent-ineligible for being directed to the abstract idea of

³ E.g., claim 1 of US 8,266,044: “1. A system for processing trades of securitized instruments based on security orders and quotes received from client computers, comprising: at least one server computer comprising a memory, and a processor, said server computer configured to perform the steps of: receiving orders and quotes, wherein specified ones of said quotes belong to a quote group, and wherein said specified ones of said quotes have associated trading parameters comprising a predefined number of bought or sold contracts relating to said quote group; generating a trade by matching said received orders and quotes to previously received orders and quotes; storing each of said orders and quotes when a trade is not generated; determining whether a quote having associated trading parameters has been filled as a result of the generated trade, and if so, determining a number of contracts that have been bought or sold within said quote group, including the generated trade; comparing said number of contracts that have been bought or sold within said quote group with said predefined number of bought or sold contracts relating to said quote group; and, automatically modifying at least one of the remaining specified ones of said quotes in the quote group if said predefined number of bought or sold contracts is exceeded.”

“managing trading risk (‘risk management’).” *Id.* at 6. Albeit “steps instructing how to process a composite trading order,” per se, and “managing trading risk (‘risk management’)” are different, for purposes of determining whether the concept to which the claims are directed to is an abstract idea, it is a difference in the level of abstraction at which the concept is described. *See Apple, Inc. v. Ameranth, Inc.*, 842 F.3d 1229, 1240–41 (Fed. Cir. 2016) (“An abstract idea can generally be described at different levels of abstraction. As the Board has done, the claimed abstract idea could be described as generating menus on a computer, or generating a second menu from a first menu and sending the second menu to another location. It could be described in other ways, including, as indicated in the specification, taking orders from restaurant customers on a computer.”) “[S]teps instructing how to process a composite trading order” describes the concept to which the claims are directed to at a very high level of abstraction, but here the concept can also be characterized at a lower level of abstraction similar to the “managing trading risk (‘risk management’)” description given for the concept to which the *Chicago Bd. Options Exchange* claims were determined to be directed to. For example, here the concept could be described as a scheme for displaying and employing composite values. *See Spec. 3:12–20*. Arguably, “the heart of the claimed invention lies [there]” *Intellectual Ventures I LLC v. Erie Indemnity*

Co., 850 F.3d 1315, 1328 (Fed. Cir. 2017).⁴ Nevertheless, when “the focus of the asserted claims” is “on collecting information, analyzing it, and displaying certain results of the collection and analysis,” the claims are directed to an abstract idea. *Elec. Power Grp.*, 830 F.3d at 1353.

Accordingly, notwithstanding the Examiner characterized the abstract idea to which the claims are directed to at a very high level of abstraction, even if the concept is described at a lower level of abstraction (e.g., displaying and employing composite values), the claims are nonetheless “directed to an abstract idea” (App. Br. 7–8).

Appellants also challenge the Examiner’s step one determination under the rubric of “an improper overgeneralization of the claims.” *See id.* at 8–10. We do not, however, see it that way. Although the Examiner’s characterization of the concept to which the claim 13 is directed to may be at a high level of abstraction, it is not incorrect. The Appellants do not explain in what way claim 13 is not directed to an abstract idea, whether it be “steps instructing how to process a composite trading order” or, more specifically, a scheme for displaying and employing composite values. The Appellants’ additional limitations, like “a display device” (App. Br. 8), add a degree of particularity. Notwithstanding that the question of whether additional limitations such as “a display device” transforms the claimed subject matter

⁴ 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); *see Genetic Techs. Ltd. v. Merial L.L.C.*, 818 F.3d 1369, 1375 (Fed. Cir. 2016) (inquiring into “the focus of the claimed advance over the prior art”); *Enfish, LLC v. Microsoft Corp.*, 822 F.3d 1327, 1335 (Fed. Cir. 2016).

into an inventive application is better addressed as a step two matter, merely adding “a degree of particularity” does not affect the first step of the *Alice* analytical framework. *Ulramercial, Inc. v. Hulu, LLC*, 772 F.3d 709, 715 (Fed. Cir. 2014).

We have reviewed all the arguments as to the step one determination but do not find them persuasive as to error in the determination that claim 13 is directed to an abstract idea.

Step two is “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 (alteration in original) (quoting *Mayo Collaborative Servs. v. Prometheus Labs., Inc.*, 566 U.S. 66, 72–73 (2012)).

In that regard, the Examiner determined that:

The claims do not include additional elements that are sufficient to amount to significantly more than the judicial exception because the additional elements make use of a computer in implementing the steps of the claimed invention. In this case, the recited computer is a generically computer elements and it does not add a meaningful limitation because the computer merely implements the instructions of the claimed invention. The use of a computer also does not improve the functioning of a computer itself or include improvement to another technology or a technical field.

Final Act. 2–3.

The Appellants argue that the Examiner failed “**to identify any additional elements and . . . to explain why each additional element does not add significantly more to the alleged abstract idea.**” App. Br. 10. However, we are satisfied that the Examiner provided sufficient explanation in this case. Claim 13 calls for “causing to be displayed on a display device,

by at least one computer processor, a composite value . . .” and “receiving, by the at least one computer processor, at least one input representing a composite trading order” Displaying and receiving are common information-processing functions of generic computers, as the Examiner has indicated. There is nothing in the claim to suggest that the scope of the claimed subject matter precludes the use of a generic computer for doing so. In fact, the intrinsic evidence supports the view that the scope of the claimed subject matter covers the use of a generic computer, in line with the Examiner’s determination. *See* Spec. 9:8–17 (“System 10 may comprise one or more clients 14 [C]lient 14 may comprise a computer, workstation, telephone, an Internet browser, an electronic notebook, a Personal Digital Assistant (PDA), a pager, or any other suitable device (wireless or otherwise)”)

The Appellants further argue that “[t]he claims recite significantly more than the alleged abstract idea.” App. Br. 12. However, other than reproducing claim 13 (*id.* at 11), it is not entirely clear what the Appellants are pointing to in the claim that transforms the abstract idea into an inventive application. The Appellants state that “the exemplary recitations of claim 13 (quoted above) recite ‘significantly more’ than ‘steps instructing how to process a composite trading order.’” *Id.* at 12. That is true. But the step two determination does not depend on the number of words in the claim but rather whether the claim includes an element or combination of elements sufficient to ensure that the subject matter claimed in practice amounts to significantly more than to be upon the abstract idea itself. As we have shown, claim 13, is directed to steps instructing how to process a composite trading order or, more specifically, a scheme or displaying and employing

composite values, which are abstract ideas, while using a generic computer as a conduit for implementing them. *See In re TLI Commc'ns LLC Patent Litig.*, 823 F.3d 607, 612 (Fed. Cir. 2016) (“Put differently, the telephone unit itself is merely a conduit for the abstract idea of classifying an image and storing the image based on its classification. Indeed, the Specification notes that it ‘is known’ that ‘cellular telephones may be utilized for image transmission,’ *id.* at col. 1 ll. 31–34, and existing telephone systems could transmit pictures, audio, and motion pictures and also had ‘graphical annotation capability,’ *id.* at col. 1 ll. 52–59.”) *Cf. Credit Acceptance Corp. v. Westlake Servs., LLC*, 859 F.3d 1044, 1057 (Fed. Cir. 2017):

Significantly, the claims do not provide details as to any non-conventional software for enhancing the financing process. *See Intellectual Ventures I LLC v. Capital One Fin. Corp.*, 850 F.3d 1332, 1342 (Fed. Cir. 2017) (explaining that “[o]ur law demands more” than claim language that “provides only a result-oriented solution, with insufficient detail for how a computer accomplishes it”); *Elec. Power Grp.*, 830 F.3d at 1354 (explaining that claims are directed to an abstract idea where they do not recite “any particular assertedly inventive technology for performing [conventional] functions”).

For these reasons, the Appellants’ arguments are unpersuasive as to error in the Examiner’s determination that the claim does not include an element or combination of elements sufficient to ensure that the subject matter claimed in practice amounts to significantly more than to be upon the abstract idea itself.

We note the question “if the claim recitations (alone or in combination) do not recite ‘significantly more’ than a ‘fundamental economic practice,’ then why are the claims deemed allowable over the art?” App. Br. 12. But “a claim for a new abstract idea is still an abstract idea.”

Synopsys, Inc. v. Mentor Graphics Corp., 839 F.3d 1138, 1151 (Fed. Cir. 2016) (quoting *Mayo*, 566 U.S. at 90). The question in step two of the *Alice* framework is not whether an additional feature is novel or nonobvious but whether the implementation of the abstract idea involves “more than performance of ‘well-understood, routine, [and] conventional activities previously known to the industry.’” *Content Extraction and Transmission LLC v. Wells Fargo Bank, Nat. Ass’n*, 776 F.3d 1343, 1347–48 (Fed. Cir. 2014) (quoting *Alice*, 134 S. Ct. at 2359).

There is a statement that “[i]n any event, if the abstract idea is simply ‘process[ing] a composite trading order,’ then the claims do not preempt or ‘tie down’ all uses or ways of ‘process[ing] a composite trading order.’” App. Br. 13. But “[w]hat matters is whether a claim threatens to subsume the full scope of a fundamental concept, and when those concerns arise, we must look for meaningful limitations that prevent the claim as a whole from covering the concept’s every practical application.” *CLS Bank Int’l v. Alice Corp. Pty. Ltd.*, 717 F.3d 1269, 1281 (Fed. Cir. 2013) (Lourie, J., concurring). Here, the additional words in the claim simply narrows the abstract idea so that it is described at a lower level of abstraction. They do not render the abstract idea to which the claim is directed to any less an abstract idea. Also, pre-emption is not a separate test.

To be clear, the proper focus is not preemption per se, for some measure of preemption is intrinsic in the statutory right granted with every patent to exclude competitors, for a limited time, from practicing the claimed invention. *See* 35 U.S.C. § 154. Rather, the animating concern is that claims should not be coextensive with a natural law, natural phenomenon, or abstract idea; a patent-eligible claim must include one or more substantive limitations that, in the words of the Supreme Court, add “significantly more” to the basic principle, with the result that the claim covers significantly less. *See*

Mayo[, 566 U.S. at 71–72]. Thus, broad claims do not necessarily raise § 101 preemption concerns, and seemingly narrower claims are not necessarily exempt.

Id.; see also *Ariosa Diagnostics, Inc. v. Sequenom, Inc.*, 788 F.3d 1371, 1379 (Fed. Cir. 2015) (“[w]hile preemption may signal patent ineligible subject matter, the absence of complete preemption does not demonstrate patent eligibility.”). Because we find the claimed subject matter covers patent-ineligible subject matter, the pre-emption concern is necessarily addressed. “Where a patent’s claims are deemed only to disclose patent ineligible subject matter under the *Mayo* framework, . . . preemption concerns are fully addressed and made moot.” *Ariosa Diagnostics*, 788 F.3d at 1379.

The Appellants further argue that

the present claims solve a problem rooted in computer technology to improve the functionality of computer-implemented trading systems by enabling traders to trade substitute trading products when a specific trading product is not available, thereby enabling greater liquidity in the electronic trading system. The claimed solution is necessarily implemented in a networked computer environment due to the networked communication between different electronic trading systems and the fast calculations required to determine substantially equivalent trading products in a fast-moving market.

App. Br. 14. Notwithstanding that claim 13 makes no mention of a networked computer environment, nevertheless for the reasons discussed — namely because the claimed subject matter covers employing generic computers for their common functions — we are unpersuaded that claim 13 recites any particular assertedly inventive technology. See also *Bancorp Servs., L.L.C. v. Sun Life Assur. Co. of Canada (U.S.)*, 687 F.3d 1266, 1278 (Fed. Cir. 2012) (“[T]he use of a computer in an otherwise patent-ineligible process for no more than its most basic function—making calculations or

computations—fails to circumvent the prohibition against patenting abstract ideas and mental processes.”); *buySAFE, Inc. v. Google, Inc.*, 765 F.3d 1350, 1355 (Fed. Cir. 2014) (stating “[t]hat a computer receives and sends the information over a network—with no further specification—is not even arguably inventive”); *OIP Techs., Inc. v. Amazon.com, Inc.*, 788 F.3d 1359, 1363 (Fed. Cir. 2015) (“relying on a computer to perform routine tasks more quickly or more accurately is insufficient to render a claim patent eligible”).

For the foregoing reasons, the Appellants’ arguments are unpersuasive as to error in the Examiner’s determination that claim 13 does not include an element or combination of elements sufficient to ensure that the claimed subject matter in practice amounts to significantly more than to be upon the abstract idea itself.

Pages 14–16 of the Appeal Brief urge that each claim be separately treated. However, the discussion there does little more than mention each claim and then rely on the arguments we have already addressed above in challenging the patent-ineligibility of claim 13. Accordingly, our earlier discussion is incorporated herein. Where all claims are directed to the same abstract idea, “addressing each claim of the asserted patents . . . [is] unnecessary.” *Content Extraction*, 776 F.3d at 1348.

We have considered all of the Appellants’ remaining arguments and have found them unpersuasive. Accordingly, we find the Examiner’s determination that representative claim 13, and claims 1–11, 14–18, 37, and 38, which stand or fall with claim 13, are directed to ineligible subject matter under 35 U.S.C. § 101 has not been shown to be in error. *Cf. LendingTree, LLC v. Zillow, Inc.*, 656 F. App’x 991, 997 (Fed. Cir. 2016) (“We have considered all of LendingTree’s remaining arguments and have found them

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unpersuasive. Accordingly, because the asserted claims of the patents in suit are directed to an abstract idea and do not present an ‘inventive concept,’ we hold that they are directed to ineligible subject matter under 35 U.S.C. § 101.”).

DECISION

The decision of the Examiner to reject claims 1–11, 13–18, 37, and 38 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)(1)(iv).

AFFIRMED