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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* HOWARD W. LUTNICK and MICHAEL SWEETING

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Appeal 2018-006155  
Application 10/938,143  
Technology Center 3600

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Before NINA L. MEDLOCK, PHILIP J. HOFFMANN, and  
AMEE A. SHAH, *Administrative Patent Judges*.

SHAH, *Administrative Patent Judge*.

DECISION ON APPEAL

STATEMENT OF THE CASE

Pursuant to 35 U.S.C. § 134(a), the Appellant<sup>1</sup> appeals from the Examiner's final decision to reject claims 187–195, which are all the pending claims. 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. The Appellant identifies the real party in interest as BGC Partners, Inc. Appeal Br. 3.

### CLAIMED SUBJECT MATTER

The Appellant's invention generally "relates to trading application program interfaces. More particularly, this invention relates to a trading application program interface suitable for use with quantitative analysis trading." Spec. ¶ 2. "Quantitative analysis trading (colloquially known as 'program trading' or 'quant trading') refers to a trading strategy that makes use of information technology to substantially remove the human element from the decision-making process involved in trading." *Id.* ¶ 3.

Claim 187 is the only independent claim on appeal, is representative of the subject matter on appeal, and is reproduced below (with added bracketing for reference):

1. A method, comprising the steps of:

[(a)] in a computer of an electronic trading system having computers in a network, executing a first trade between a first party on a first side of the first trade and a first counterparty on a second side of the first trade, in which the first trade is for a first volume of an item and at a first price;

[(b)] in response to executing the first trade, providing, by the electronic trading system, the first party with a period of exclusivity for trading in the item at the first price on the first side of the first trade, in which providing the period of exclusivity includes the electronic trading system restricting matching of at least one order for another trade on the first side of the first trade from at least one other party during the period of exclusivity;

[(c)] while the period of exclusivity is in effect, the electronic trading system accepting trading commands from excluded parties requesting trades in the item at prices less favorable than the first price of the first trade, and executing trades on the accepted commands while the period of exclusivity remains in effect;

[(d)] during the period of exclusivity, preventing, by the electronic trading system, cancelation of second orders that are

for the second side of the first trade from parties other than the first counterparty;

[(e)] determining, by the electronic trading system, that the first party has additional volume for trading on the first side of the first trade beyond the volume of the first counterparty for trading on the second side of the first trade;

[(f)] in response to an end of the period of exclusivity and in response to determining that the first party has the additional volume for trading on the first side of the trade, determining, by the electronic trading system, matches with the additional volume and the second orders that are for the second side of the first trade in a price and time priority;

[(g)] allowing, by the electronic trading system, cancelation of unmatched portions of the second orders remaining after determining the matches with the additional volume and the second orders.

Appeal Br. 13 (Claims App.).

#### REFERENCES

The prior art relied upon by the Examiner is:

<b>Name</b>	<b>Reference</b>	<b>Date</b>
Donato et al. ("Donato")	US 2002/0077962 A1	June 20, 2002
Keith	US 7,496,533 B1	Feb. 24, 2009

## REJECTIONS<sup>2</sup>

Claims 187–195<sup>3</sup> stand rejected under pre AIA 35 U.S.C. § 112, second paragraph, as being indefinite.

Claims 187–195 stand rejected under 35 U.S.C. § 101 as being directed to a judicial exception without significantly more.

Claims 187–189 and 191–195 stand rejected under pre-AIA 35 U.S.C. § 103(a) as being unpatentable over Keith and Donato.

Claim 190 stands rejected under pre-AIA 35 U.S.C. § 103(a) as being unpatentable over Keith, Donato, and Official Notice.

## OPINION

### *Written Description<sup>4</sup>*

The Examiner rejects independent claim 187 (and thus also dependent claims 188–195) for being indefinite under pre-AIA 35 U.S.C. § 112, second paragraph because limitation (c) of accepting trading commands from excluded parties during the period of exclusivity “is vague and indefinite in that it is not clear how trades can be executed on accepted commands (*during the period of exclusivity*) in that the parties are ***excluded*** from requesting trades during this period.” Final Act. 3–4. The Examiner additionally rejects dependent claims 188 and 189 because “[i]t is not clear

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<sup>2</sup> The Examiner withdraws the rejections of claims 1–16 under pre-AIA 35 U.S.C. § 112, first and second paragraphs. Ans. 2.

<sup>3</sup> We consider the Examiner’s inclusion of claims 185 and 186 to be inadvertent error as the “Examiner asserts that the Office Action was clearly referring to the claim limitation of **claim 187.**” Ans. 17.

<sup>4</sup> We address the rejections in the order presented by the Examiner in the Final Action.

if ‘*the party*’ refers to ‘*the first party*’, ‘*at least one other party*’, ‘*the first counterparty*’ or something else.” *Id.* at 4.

The Appellant contends that because the Examiner “fails to even once identify one of ordinary skill in the art,” the rejection is improper. Appeal Br. 9. We disagree.

The Appellant does not direct attention to any specific requirement that the Examiner’s rejection must state the term “one of ordinary skill in the art,” and we find no such requirement. Rather, “[t]he [E]xaminer’s focus during examination of claims for compliance with the requirement for definiteness of 35 U.S.C. 112(b) or pre-AIA 35 U.S.C. 112, second paragraph, is whether the claim meets the threshold requirements of clarity and precision set forth in the statute.” MANUAL OF PATENT EXAMINING PROCEDURE (“MPEP”) § 2173.02(II) (Jan. 2018). “If the language of the claim is such that a person of ordinary skill in the art could not interpret the metes and bounds of the claim so as to understand how to avoid infringement, a rejection of the claim under 35 U.S.C. 112(b) or pre-AIA 35 U.S.C. 112, second paragraph, is appropriate.” *Id.* To establish a clear record, the Examiner

should provide enough information in the Office action to permit applicant to make a meaningful response, as the indefiniteness rejection requires the applicant to explain or provide evidence as to why the claim language is not indefinite or amend the claim. For example, in making a prima facie case of indefiniteness, the examiner should point out the specific term or phrase that is indefinite, explain in detail why such term or phrase renders the metes and bounds of the claim scope unclear and, whenever practicable, indicate how the indefiniteness issues may be resolved to overcome the rejection.

*Id.* § 2173.02(III)(B). Here, the Examiner clearly articulates why the claim language is indefinite.

The Appellant, however, provides no explanation, evidence, or technical reasoning “why [the] claim language would be recognized by a person of ordinary skill in the art as definite.” *Id.*

We therefore sustain the Examiner’s rejections under pre-AIA 35 U.S.C. § 112, second paragraph of claim 157–195.

### ***Patentable Subject Matter***

The Appellant argues the claims as a group. *See* Appeal Br. 6–8. We select claim 187 as representative of the group, with claims 188–195 standing or falling therewith. *See* 37 C.F.R. § 41.37(c)(1)(iv).

#### *35 U.S.C. § 101 Framework*

An invention is patent-eligible if it claims a “new and useful process, machine, manufacture, or composition of matter.” 35 U.S.C. § 101. However, the Supreme Court has long interpreted 35 U.S.C. § 101 to include implicit exceptions: “[I]aws of nature, natural phenomena, and abstract ideas” are not patentable. *Alice Corp. v. CLS Bank Int’l*, 573 U.S. 208, 216 (2014).

In determining whether a claim falls within an excluded category, we are guided by the Supreme Court’s two-step framework, described in *Mayo* and *Alice*. *Id.* at 217–18 (citing *Mayo Collaborative Servs. v. Prometheus Labs., Inc.*, 566 U.S. 66, 75–77 (2012)). In accordance with that framework, we first determine what concept the claim is “directed to.” *See Alice*, 573 U.S. at 219 (“On their face, the claims before us are drawn to the concept of intermediated settlement, *i.e.*, the use of a third party to mitigate

settlement risk.”); *see also Bilski v. Kappos*, 561 U.S. 593, 611 (2010) (“Claims 1 and 4 in petitioners’ application explain the basic concept of hedging, or protecting against risk.”).

Concepts determined to be abstract ideas, and thus patent ineligible, include certain methods of organizing human activity, such as fundamental economic practices (*Alice*, 573 U.S. at 219–20; *Bilski*, 561 U.S. at 611); mathematical formulas (*Parker v. Flook*, 437 U.S. 584, 594–95 (1978)); and mental processes (*Gottschalk v. Benson*, 409 U.S. 63, 67 (1972)). Concepts determined to be patent eligible include physical and chemical processes, such as “molding rubber products” (*Diamond v. Diehr*, 450 U.S. 175, 191 (1981)); “tanning, dyeing, making water-proof cloth, vulcanizing India rubber, smelting ores” (*id.* at 182 n.7 (quoting *Corning v. Burden*, 56 U.S. 252, 267–68 (1853))); and manufacturing flour (*Benson*, 409 U.S. at 69 (citing *Cochrane v. Deener*, 94 U.S. 780, 785 (1876))).

In *Diehr*, the claim at issue recited a mathematical formula, but the Supreme Court held that “[a] claim drawn to subject matter otherwise statutory does not become nonstatutory simply because it uses a mathematical formula.” *Diehr*, 450 U.S. at 176; *see also id.* at 191 (“We view respondents’ claims as nothing more than a process for molding rubber products and not as an attempt to patent a mathematical formula.”). Having said that, the Supreme Court also indicated that a claim “seeking patent protection for that formula in the abstract . . . is not accorded the protection of our patent laws, . . . and this principle cannot be circumvented by attempting to limit the use of the formula to a particular technological environment.” *Id.* (citing *Benson* and *Flook*); *see, e.g., id.* at 187 (“It is now commonplace that an *application* of a law of nature or mathematical formula

to a known structure or process may well be deserving of patent protection.”).

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 (internal quotation marks omitted). “A claim that recites an abstract idea must include ‘additional features’ to ensure ‘that the [claim] is more than a drafting effort designed to monopolize the [abstract idea].’” *Id.* (alterations in original) (quoting *Mayo*, 566 U.S. at 77). “[M]erely requir[ing] generic computer implementation[] fail[s] to transform that abstract idea into a patent-eligible invention.” *Id.*

After the Appellant’s Briefs were filed and the Examiner’s Answer mailed, the U.S. Patent and Trademark Office (“USPTO”) published revised guidance on the application of § 101. *2019 REVISED PATENT SUBJECT MATTER ELIGIBILITY GUIDANCE*, 84 Fed. Reg. 50 (Jan. 7, 2019) (“2019 Revised Guidance”). That guidance revised the USPTO’s examination procedure with respect to the first step of the *Mayo/Alice* framework by (1) providing groupings of subject matter that are considered an abstract idea; and (2) clarifying that a claim is not “directed to” a judicial exception if the judicial exception is integrated into a practical application of that exception. *Id.* at 50. The 2019 Revised Guidance, by its terms, applies to all applications, and to all patents resulting from applications, filed before, on,

or after January 7, 2019. *Id.*<sup>5</sup> Under the 2019 Revised 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 OF 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* 2019 Revised Guidance, 84 Fed Reg. at 54, 56.

#### *Step One of the Mayo/Alice Framework*

##### Reciting a Judicial Exception

Under the first step of the *Mayo/Alice* framework and Step 1 of Office Guidelines (*see* 2019 Revised Guidance, 84 Fed. Reg. at 53–54), the Examiner first determines that claim 187 “is directed to a *method*,” i.e., a process, one of the categories of statutory subject matter. Final Act. 5.

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<sup>5</sup> The 2019 Revised Guidance supersedes MPEP § 2106.04(II) and also supersedes all versions of the USPTO’s “Eligibility Quick Reference Sheet Identifying Abstract Ideas.” *See* 2019 Revised Guidance, 84 Fed. Reg. 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.”).

Under the first step of the *Mayo/Alice* framework and Step 2A, Prong 1 of the 2019 Revised Guidelines, 84 Fed. Reg. at 54, the Examiner determines that claim 187 is “directed to a method for identifying trade prices of securities which is a fundamental business practice of offer-based price optimization” and an abstract idea. Final Act. 6 (emphases omitted). When viewed through the lens of the 2019 Revised Guidance, the Examiner’s analysis depicts the claimed subject matter as a “[c]ertain method[] of organizing human activity—fundamental economic principles or practices (including hedging, insurance, mitigating risk).” 2019 Revised Guidance, 84 Fed. Reg. at 52 (footnote omitted).

The Appellant contends that the Examiner’s characterization is in error because the claim is not analogous or related to the concept of “price testing” in *OIP Techs., Inc. v. Amazon.com, Inc.*, 788 F.3d 1359 (Fed. Cir. 2015). Appeal Br. 6. The Appellant also argues that the Examiner “unlawfully over simplifies the claim when saying that they are directed to ‘identifying trade prices of securities’” and that “[t]he claim[] include[s] numerous meaningful limitations that are ignored by this characterization.” Appeal Br. 6–7. For at least the following reasons, we disagree.

Before determining whether the claim at issue is directed to an abstract idea, we first determine to what the claim is directed. The Federal Circuit has explained that “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.’” *Enfish, LLC v. Microsoft Corp.*, 822 F.3d 1327, 1335 (Fed. Cir. 2016) (quoting *Internet Patents Corp. v. Active Network, Inc.*, 790 F.3d 1343, 1346 (Fed. Cir. 2015)). It asks whether the focus of the claims is on a specific improvement

in relevant technology or on a process that itself qualifies as an “abstract idea” for which computers are invoked merely as a tool. *See id.* at 1335–36. Here, it is clear from the Specification, and the claim language, that the focus of claim 187 is on an abstract idea, and not on any improvement to technology and/or a technical field.

The Specification provides for “a trading application program interface suitable for quantitative analysis trading.” Spec. ¶ 9. One object of the invention is “to allow such users to identify and trade prices outside the boundaries of a current trading application’s interactive trading rules and according to their particular requirements and where suitable logic allows.” *Id.* ¶ 12.

Consistent with the disclosure, claim 187 recites “[a] method, comprising the steps of:” (a) “in a computer of an electronic trading system having computers in a network, executing a first trade”; (b) “in response to executing the first trade, providing, by the electronic trading system, the first party with a period of exclusivity for trading in the item” that restricts matching of an order with another party; (c) “while the period of exclusivity is in effect, the electronic trading system accepting [and executing] trading commands from excluded parties requesting trades in the item at prices less favorable than the first price of the first trade”; (d) “during the period of exclusivity, preventing, by the electronic trading system, cancelation of second orders” under certain criteria; (e) “determining, by the electronic trading system, that the first party has additional volume for trading on the first side of the first trade”; (f) in response to an end of the exclusivity period and determination of additional volume, “determining, by the electronic trading system, matches with the additional volume and the second orders

that are for the second side of the first trade in a price and time priority;” and (g) “allowing, by the electronic trading system, cancelation of unmatched portions of the second orders remaining after determining the matches with the additional volume and the second orders.” Appeal Br. 13 (Claims. App).

When considered collectively and under the broadest reasonable interpretation, the limitations of claim 187 recite a method for identifying prices of and trading securities according to particular requirements.<sup>6</sup> Limitations (a), (b), (d), (e), (f), and (g) of executing a trade, providing a period of exclusivity, preventing cancelation of a trade, determining a party has additional volume, determining matches, and allowing cancelation of portions of orders are recited functionally without technical or technological details on how, i.e., by what algorithm or on what basis/method, the electronic trading system performs these steps. Limitations (a) and (c) of executing a trade and accepting trading commands are similar to gathering and transmitting information, which are activities ordinarily done in trading securities and are extra-solution activities. *See In re Bilski*, 545 F.3d 943, 963 (Fed. Cir. 2008) (en banc), *aff’d sub nom Bilski v. Kappos*, 561 U.S. 593 (2010) (characterizing data gathering steps as insignificant extra-solution activity). Limitations (b), (d), and (g) of restricting matching, preventing trades, and allowing cancelation under certain conditions are similar to filtering data, which is an abstract idea (*see BASCOM Glob. Internet Servs., Inc. v. AT&T Mobility LLC*, 827 F.3d 1341, 1348 (Fed. Cir. 2016)) and can

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<sup>6</sup> We note 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). The Board’s “slight revision of its abstract idea analysis does not impact the patentability analysis.” *Id.* at 1241.

comprise an analysis of data based on rules, which can be performed mentally (*see FairWarning IP LLC v. Iatric Systems, Inc.*, 839 F.3d 1089, 1093 (Fed. Cir. 2106) (analyzing information according to certain rules is a mental process). Limitations (e) and (f) of determining additional volume and determining matched are steps of analyzing information, which also can be performed mentally. *See Electric Power Grp., LLC v. Alstom S.A.*, 830 F.3d 1350, 1354 (Fed. Cir. 2016) (“[W]e have treated analyzing information by steps people go through in their minds, or by mathematical algorithms, without more, as essentially mental processes”).

Similar to the concepts of hedging in *Bilski*, of “offer-based price optimization” in *OIP Technologies*, 788 F.3d at 1362–63, and of “placing an order based on displayed market information” in *Trading Technologies International, Inc. v. IBG LLC*, 921 F.3d 1084, 1092 (Fed. Cir. 2019), identifying prices of and trading securities according to particular requirements is a fundamental economic practice. Accordingly, we conclude the claim recites a fundamental economic practice, which is one of the certain methods of organizing human activities identified in the 2019 Revised Guidance, 84 Fed. Reg. at 52.

#### Integration into a Practical Application

Under Step 2A, Prong 2 of the 2019 Revised Guidance, 84 Fed. Reg. at 54, we look to 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,” i.e., “integrates a judicial exception into a practical application.” Here, the only additional element recited in claim 187 beyond the abstract idea is an electronic trading system — an

element that, as the Examiner observes (Final Act. 6, 8), is described in the Specification as a generic computer system with generic computers linked by a network. *See* Spec. ¶¶ 27–34, Figs. 1, 2.

We find no indication in the Specification, nor does the Appellant direct us to any indication, that the operations recited in claim 187 require any specialized computer hardware or other inventive computer components, i.e., a particular machine, invoke any asserted inventive programming, or that the claimed invention is implemented using other than generic computer components to perform generic computer functions. *See DDR Holdings, LLC v. Hotels.com, L.P.*, 773 F.3d 1245, 1256 (Fed. Cir. 2014) (“[A]fter *Alice*, there can remain no doubt: recitation of generic computer limitations does not make an otherwise ineligible claim patent-eligible.”). Accordingly, we conclude claim 187 does not contain an element that imposes a meaningful limit on the abstract idea that integrates the abstract idea into a practical application.

Thus, we are not persuaded of error in the Examiner’s determination that claim 187 is directed to an abstract idea.

#### *Step Two of the Mayo/Alice Framework*

Under the second step in the *Alice* framework (corresponding to Step 2B of the 2019 Revised Guidance), we find supported the Examiner’s determination that the limitations of claim 187, taken individually and as an ordered combination, do not amount to significantly more than the judicial exception, that the electronic trading system is “recited at a high level of generality and [is] recited as performing generic computer functions routinely used in computer applications,” and that the claimed system “perform[s] generic computer functions that are well-understood, routine

and conventional activities [and] amount[s] to no more than implementing the abstract idea with a computerized system.” Final Act. 9; *see also id.* at 10.

The Appellant argues that the Examiner’s “allegations amount to a factual finding of the state of the art made without evidentiary support. It is not readily apparent that all of these claim limitations were actually well understood, routine, conventional or previously known to the industry at the time of the filing of this application.” Appeal Br. 7. However, the Examiner cites to cases cited in the USPTO’s *2014 Interim Guidance on Patent Subject Matter Eligibility*, 79 Fed. Reg. 74618 (Dec. 16, 2014) (Final Act. 9) as support for the finding that the claimed generic system performs functions that are well-understood, routine, and conventional (*see id.*). In doing so, the Examiner follows “Changes in Examination Procedure Pertaining to Subject Matter Eligibility, Recent Subject Matter Eligibility Decision (*Berkheimer v. HP Inc.*), 881 F.3d 1360 (Fed. Cir. 2018),” USPTO Memorandum, Robert W. Bahr, Deputy Commissioner for Patent Examination Policy, April 19, 2018 (the “*Berkheimer Memo*”).

The court in *Berkheimer* held that “[t]he patent eligibility inquiry may contain underlying issues of fact.” *Berkheimer*, 881 F.3d at 1365 (quoting *Mortg. Grader, Inc. v. First Choice Loan Servs. Inc.*, 811 F.3d 1314, 1325 (Fed. Cir. 2016) (“The § 101 inquiry ‘*may* contain underlying factual issues.”)). But, the court also held that “[w]hen there is *no genuine issue of material fact* regarding whether the claim element or claimed combination is well-understood, routine, [and] conventional to a skilled artisan in the relevant field, this issue can be decided on summary judgment as a matter of

law.” *Berkheimer*, 881 F.3d at 1368 (emphasis added). This qualification has been subsequently reiterated.

If there is a genuine dispute of material fact, Rule 56 requires that summary judgment be denied. In *Berkheimer*, there was such a genuine dispute for claims 4–7, but not for claims 1–3 and 9. . . . [I]n accordance with *Alice*, we have repeatedly recognized the absence of a genuine dispute as to eligibility for the many claims that have been defended as involving an inventive concept based merely on the idea of using existing computers or the Internet to carry out conventional processes, with no alteration of computer functionality.

*Berkheimer v. HP Inc.*, 890 F.3d 1369, 1371–73 (Fed. Cir. 2018) (Order, On Petition for rehearing en banc, May 31, 2018) (Moore, J., concurring); *see also Aatrix Software, Inc. v. Green Shades Software, Inc.*, 890 F.3d 1354, 1368 (Fed. Cir. 2018) (“A factual allegation or dispute should not automatically take the determination out of the court’s hands; rather, there needs to be justification for why additional evidence must be considered—the default being a legal determination.”). Here, the Specification indisputably shows the claimed computing system was conventional at the time of filing. And the Appellant’s simple statement that the functions are not well-understood, routine, and conventional (Appeal Br. 7) is an unsupported allegation. Accordingly, no genuine issue of material fact exists as to the well-understood, routine, or conventional nature of the system as claimed.

The Appellant also argues that the claim elements amount to significantly more than the abstract idea because, like *BASCOM*, “the claims here apply ideas related to computers and networks in a more efficient manner.” Appeal Br. 8. However, the Appellant does not show how the claim here is similar to *BASCOM*’s “particular arrangement of elements

[that] is a technical improvement over prior art ways of filtering such content.” 827 F.3d at 1350. The patent at issue in *BASCOM* “claim[ed] a technology-based solution (not an abstract-idea-based solution implemented with generic technical components in a conventional way) to filter content on the Internet that overcomes existing problems with other Internet filtering systems.” *Id.* at 1351. The court determined that “[b]y taking a prior art filter solution (one-size-fits-all filter at the ISP server) and making it more dynamic and efficient (providing individualized filtering at the ISP server), the claimed invention represents a ‘software-based invention[ ] that improve[s] the performance of the computer system itself.’” *Id.* Here, there is no such improvement to the claimed computer component itself.

The Appellant does not offer additional reasoning or argument why the claim “[a]dds a specific limitation or combination of limitations that [is] not well-understood, routine, conventional activity in the field, which is indicative that an inventive concept may be present.” 2019 Revised Guidance, 84 Fed. Reg. at 56. The claimed generic system operates in its ordinary and conventional capacity to perform the well-understood, routine, and conventional functions of receiving and transmitting data (i.e., executing a trade and accepting commands), analyzing data (i.e., determining volume and matches), filtering data (i.e., restricting matches and preventing cancelations), and performing an action based on the analysis (i.e., allowing cancelation). *See* Spec. ¶¶ 27–34 (describing a generic computer system); *Electric Power*, 830 F.3d at 1354–55 (gathering, sending, monitoring, analyzing, selecting, and presenting information does not transform the abstract process into a patent-eligible invention); *Alice*, 573 U.S. at 226 (“Nearly every computer will include a ‘communications controller’ and

‘data storage unit’ capable of performing the basic calculation, storage, and transmission functions required by the method claims.”); *BASCOM*, 827 F.3d at 1349 (filtering, generally, is not inventive). We note that, as discussed above, the claim simply recites the functional results to be achieved by a conventional computer system. The claim “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).

Considered as an ordered combination, the components of Appellant’s claim 187 add nothing that is not already present when the steps are considered separately. The sequence of receiving and transmitting data (i.e., executing a trade, providing a period, accepting commands), analyzing data (i.e., determining volume and matches), filtering data (i.e., preventing cancelations), and performing an action based on the analysis (i.e., allowing cancelation) is equally generic and conventional or otherwise held to be abstract. *See Electric Power*, 830 F.3d at 1354–56 (holding that the sequence of gathering, analyzing, and displaying in real-time was abstract); *OIP Techs.*, 788 F.3d at 1363–64 (holding that sequence of sending, communicating, gathering, determining, selecting, and sending data), and *FairWarning.*, 839 F.3d at 1095 (holding that sequence of generating a rule related to accessing information, applying the rule, and storing and announcing the results was abstract). The ordered combination of the steps is, therefore, ordinary and conventional.

Thus, we are not persuaded of error in the Examiner’s determination that the limitations of the claim do not transform the claim into significantly more than the abstract idea.

We therefore sustain the Examiner's rejection under 35 U.S.C. § 101 of claim 187 and of claims 188–195, the rejection of which stands with claim 187.

### *Obviousness*

The Examiner determines that the combination of Keith and Donato teaches the method claimed in independent claim 187. *See* Final Act. 12. Specifically, the Examiner finds that Keith teaches limitations (b), (c), (d), and (g) of providing a period of exclusivity restricting matching, accepting trading commands from excluded parties, canceling second orders, and allowing cancelation of unmatched portions. *See* Final Act. 12–13; *see also* Ans. 18–19. The Examiner finds that Donato teaches limitation (e) of determining additional volume, and that Keith and Donato together teach limitations (a) and (f) of executing a first trade and determining matches with the additional volume. *See* Final Act. 13–14. The Examiner determines it would have been obvious to one of ordinary skill in the art to combine Keith and Donato to “provide[] a flexible and user responsive trading system that encourages users to post bids, and encourages other users to make offers on such bids.” *Id.* at 15.

We find the Examiner has established a prima facie case of obviousness as the Examiner has provided articulated reasoning with rational underpinning to support a legal conclusion of obviousness. *See KSR Int'l Co. v. Teleflex Inc.*, 550 U.S. 398, 418 (2007). Therefore, the burden shifts to the Appellant to rebut the Examiner's prima facie case by distinctly and specifically pointing out the supposed errors in the Examiner's action, as well as the specific distinctions believed to render the claims patentable over the applied references. *See* 37 C.F.R. § 41.37(c)(iv) (“A statement which

merely points out what a claim recites will not be considered an argument for separate patentability of the claim.”); *see also In re Lovin*, 652 F.3d 1349, 1357 (Fed. Cir. 2011) (“[W]e hold that the Board reasonably interpreted Rule 41.37 to require more substantive arguments in an appeal brief than a mere recitation of the claim elements and a naked assertion that the corresponding elements were not found in the prior art.”).

The Appellant has failed to carry their burden. Rather than distinctly pointing out the Examiner’s supposed errors, the Appellant has made mere general allegations that the claims define a patentable invention because the Examiner has failed to establish a *prima facie* case of unpatentability, without specifically articulating what gaps exist between the cited references and the claims. For example, although the Appellant appears to contend that Keith does not teach limitations (c) and (d) of accepting trading commands and canceling second orders during the period of exclusivity (*see* Appeal Br. 10–12), the Appellant does not provide persuasive arguments or evidence to support that contention.

Viewed as a whole, the Appellant’s arguments amount to a recitation of the claim language and a quotation of each of the cited portions of the prior art reference, from which the Appellant summarily concludes that the quoted language “do[es] not teach or suggest anything related to exclusivity, cancelation prevention, or accepting of orders during exclusivity. There is simply no discussion that appears relevant to these claim limitations at all in these citations.” Appeal Br. 10–12. Other than seeking direct quotations of identical terminology, the Appellant has not identified error in the Examiner’s interpretations of the cited references or the claim language, such as why the Examiner’s interpretation of Keith’s “holding tank” as

equivalent to the claimed “period of exclusivity” (Ans. 18) or the findings regarding cancelation prevention and accepting orders during exclusivity are in error. The Appellant may well disagree with how the Examiner interpreted and applied the references, but the Appellant offers no substantive arguments to rebut the specific underlying factual findings made by the Examiner in support of the ultimate legal conclusion of obviousness. And we decline to examine the claim *sua sponte*, looking for distinctions over the prior art. *Cf. In re Baxter Travenol Labs.*, 952 F.2d 388, 391 (Fed. Cir. 1991) (“It is not the function of this court to examine the claims in greater detail than argued by an appellant, looking for [patentable] distinctions over the prior art.”).

In the absence of a more detailed explanation, we are not persuaded of error on the part of the Examiner. *See Jung*, 637 F.3d. at 1365 (“[I]t has long been the Board’s practice to require an applicant to identify the alleged error in the examiner’s rejections,” citing *Ex Parte Frye*, Appeal No. 2009-006013, 2010 WL 889747, at \*4 (BPAI Feb. 26, 2010) (precedential) (“The panel then reviews the obviousness rejection for error based upon the issues identified by appellant, and in light of the arguments and evidence produced thereon.”)).

We therefore sustain the Examiner’s rejection under 35 U.S.C. § 103(a) as obvious over Keith and Donato of independent claim 187 and dependent claims 188, 189, and 191–195, which were not argued separately. We also sustain the rejection under 35 U.S.C. § 103(a) as obvious over Keith, Donato, and Official Notice of claim 190, for which no separate argument was presented.

### CONCLUSION

The Examiner's decision to reject claims 187–195 is sustained.

### DECISION SUMMARY

In summary:

<b>Claims Rejected</b>	<b>35 U.S.C. §</b>	<b>Reference(s)/Basis</b>	<b>Affirmed</b>	<b>Reversed</b>
187–195	112, second paragraph	Indefiniteness	187–195	
187–195	101	Eligibility	187–195	
187–189, 191–195	103	Keith, Donato	187–189, 191–195	
190	103	Keith, Donato, Official Notice	190	
<b>Overall Outcome</b>			187–195	

### 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**