## UNITED STATES PATENT AND TRADEMARK OFFICE

## BEFORE THE PATENT TRIAL AND APPEAL BOARD

GAIN CAPITAL HOLDINGS, INC., Petitioner,

v.

OANDA CORPORATION, Patent Owner.

> CBM2020-00021 Patent 8,392,311 B2

Before SALLY C. MEDLEY, JUSTIN T. ARBES, and SUSAN L. C. MITCHELL, *Administrative Patent Judges*.

ARBES, Administrative Patent Judge.

DECISION Denying Institution of Covered Business Method Patent Review 35 U.S.C. § 324

#### I. INTRODUCTION

A. Background and Summary

Petitioner GAIN Capital Holdings, Inc. filed a Petition (Paper 2, "Pet.") requesting a covered business method ("CBM") patent review of claims 1–7 of U.S. Patent No. 8,392,311 B2 (Ex. 1001, "the '311 patent") pursuant to 35 U.S.C. § 321(a). Patent Owner OANDA Corporation filed a Preliminary Response (Paper 8, "Prelim. Resp.") pursuant to 35 U.S.C. § 323. Pursuant to 35 U.S.C. § 324(a), the Director may not authorize a covered business method patent review unless the information in the petition, if unrebutted, "would demonstrate that it is more likely than not that at least 1 of the claims challenged in the petition is unpatentable." For the reasons that follow, we do not institute a covered business method patent review.

#### B. Related Matters

Petitioner states that the '311 patent is asserted in *OANDA Corp. v. GAIN Capital Holdings, Inc.*, No. 2:20-cv-5784 (D.N.J.), and related to two other patents, U.S. Patent Nos. 7,146,336 B2 (Ex. 1002, "the '336 patent") and 7,496,534 B2, challenged in Cases CBM2020-00022 and CBM2020-00023, respectively. Pet. 2–3.

#### C. The '311 Patent

The '311 patent discloses a system and method that "allows traders to trade currencies over a computer network." Ex. 1001, col. 1, l. 50–col. 2, l. 48, col. 3, ll. 10–12. According to the '311 patent, trading in a "traditional on-line currency market" involved a "three-way handshake" with the following steps:

(1) the trader specifies to a dealer the currency pair and the amount that he would to trade (but does not specify whether he would like to buy or sell); (2) the dealer specifies to the trader both a bid and an ask price and gives the trader several seconds to respond (the dealer not knowing whether the trader will buy, sell, or reject the offer); and (3) the trader either rejects the offer or specifies whether he is buying or selling (his response must occur within a time frame of a few seconds).

*Id.* at col. 1, ll. 22–35. The "three-way handshake" process was "impractical because of Internet delays: the trader might not actually have a few seconds to respond before the dealer withdraws the offer." *Id.* at col. 1, ll. 32–35. Corporate firewalls also "inhibit[ed] the ability of on-line trading systems to access information from and transfer information to users behind corporate firewalls." *Id.* at col. 1, ll. 39–46. The '311 patent seeks to overcome those issues by implementing a system that allows traders to "obtain real-time data feeds of current exchange rates" and "place buy and sell orders in the real-time market." *Id.* at col. 3, ll. 17–22.







Figure 1 depicts the three parties involved in the trading system, communicating with each other over the Internet: "(1) traders that are distributed around the world; (2) Trading System servers; and (3) 'Partners' consisting of the financial institution(s) through which real currency exchange trades are executed, and from which real-time data feeds are obtained." *Id.* at col. 3, 11. 37–42. Traders interact with the system via a web page with a Java applet. *Id.* at col. 3, 11. 17–22, 57–64, Figs. 2, 5. The Trading System servers include various "modules," such as a database management system (DBMS), server front-end, rate server/pricing engine,

value at risk (VAR) server, transaction server, interest rate manager, trade manager, margin control manager, trading system monitor, hedging engine, partner bank interface, and computer systems monitor. *Id.* at col. 1, 11. 50–60, col. 6, 1. 15–col. 9, 1. 38.

The '311 patent discloses a "two-way handshake" process involving the following steps, which avoids the "timing constraints" of the prior "three-way handshake" process:

(1) a trader specifies in her trade order: (a) a currency pair; (b) a desired amount to trade; (c) whether she wishes to buy or sell; and (optionally) (d) upper and lower limits on an acceptable exchange rate; and (2) a dealer (in this case, a preferred Trading System) executes the trade using the most current "market rates" (as calculated by the system). However, the system only executes the order if the calculated market rate lies above any specified lower limit and below any specified upper limit.

*Id.* at col. 4, ll. 8–23. A trader makes a trade request by entering the order information and pressing a button, causing a message to be sent to the Trading System server "where the market price is calculated based on such factors as market data, size of the transaction, time of day, the Trading System's current exposure, and predictions on market direction. The trade order is executed using this market price." *Id.* at col. 4, ll. 42–51. "As such, the Trading System operates as a market maker." *Id.* at col. 4, ll. 52–53. "A message is then sent back to the trader with specific trade details" in a pop-up window on the trader's web browser. *Id.* at col. 4, ll. 53–56.



Figure 16 of the '311 patent is reproduced below.

Figure 16 depicts the steps of the disclosed trading method. *Id.* at col. 3, ll. 4–5. "At step 1605, a trader desiring to trade opens a Trading Station display, and at step 1610 clicks a 'Buy/Sell' button 510 on the Trading Station display." *Id.* at col. 4, l. 64–col. 5, l. 2. "At step 1615 an order window is displayed" and "[a]t step 1620 the trader decides whether to place a market order or an entry order." *Id.* at col. 5, ll. 2–4. "Market Orders are

orders that are transacted immediately based on market exchange rates," whereas "Entry Orders are orders that are executed when the exchange rate crosses a certain threshold." Id. at col. 15, ll. 61-64. At steps 1625-1635, the trader enters order parameters depending on the type of order. *Id.* at col. 5, ll. 4–10. At step 1640, "the trader submits the order by clicking a 'Submit' button." Id. at col. 5, ll. 11-14. "At step 1645 data describing the order is sent by the Trading Station application to a Trading System server, where the data is stored. At step 1650 a current market price for the currency the trader desires to purchase is calculated." Id. at col. 5, ll. 14–18. "At step 1655 the trader's order is executed if (a) the trader's order is a market order and the calculated market price is within the limits set by the trader in the market order form" or "(b) [the] order is an entry order and the calculated market price meets the threshold(s) specified in the Entry order form." Id. at col. 5, ll. 18–23. "At step 1660 the Trading System server sends trade status data to the trader's Trading Station application. This data includes an indication that the order has been executed, if that is the case, and at any rate includes an indication that the order has been received." Id. at col. 5, ll. 24–28. "At step 1665 the Trading Station application displays an order acknowledgment window . . . that displays order status information." Id. at col. 5, ll. 28-30.

#### D. Illustrative Claims

Challenged claims 1 and 7 of the '311 patent are independent. Claims 2–6 depend from claim 1. Claims 1 and 7 recite:

1. A method of trading currencies over a computer network connecting a trading system server and at least one trading client system, comprising the steps of: (i) at the trading system server, determining and dynamically maintaining a plurality of current exchange rates, each current exchange rate relating to a pair of currencies and including a first price to buy a first currency of the pair with respect to a second currency of the pair and a second price to sell the first currency of the pair with respect to the second currency of the pair;

(ii) transmitting data from the trading system server to a trading client system, the transmitted data representing at least one current exchange rate at the time of the transmission;

(iii) at the trading client system, displaying the first and second prices for each received current exchange rate to a user;

(iv) at the trading client system, accepting input from the user identifying a pair of currencies the user desires to trade, an amount of at least one currency of the pair desired to be traded and a requested trade price at which it is desired to effect the trade;

(v) transmitting the accepted input from the trading client system to the trading system server;

(vi) at the trading system server, comparing the requested trade price to the respective first price or second price of the corresponding current exchange rate at that time and, if the respective first price or second price of the corresponding current exchange rate at that time is equal to or better than the requested trade price, effecting the trade at the corresponding respective current exchange rate first price or second price and if the corresponding current exchange rate is worse than the requested trade price, refusing the trade; and

(vii) transmitting from the trading system server to the trading client system an indication of whether the trade was refused or transacted and, if transacted, an indication of the price the trade was transacted at.

7. A method of trading currencies over a computer network connecting a trading system server and at least one trading client system, comprising the steps of:

(i) at the trading system server, determining and dynamically maintaining a plurality of current exchange rates,

each current exchange rate relating to a pair of currencies and including a first price to buy a first currency of the pair with respect to a second currency of the pair and a second price to sell the first currency of the pair with respect to the second currency of the pair;

(ii) transmitting data from the trading system server to a trading client system, the transmitted data representing at least one current exchange rate at the time of the transmission;

(iii) receiving at the trading system server input from a user of the trading client system identifying a pair of currencies the user desires to trade, an amount of at least one currency of the pair desired to be traded and a requested trade price at which it is desired to effect the trade;

(iv) at the trading system server, comparing the requested trade price to the respective first price or second price of the corresponding current exchange rate at that time and, if the respective first price or second price of the corresponding current exchange rate at that time is equal to or better than the requested trade price, effecting the trade at the corresponding respective current exchange rate first price or second price and if the corresponding current exchange rate is worse than the requested trade price, refusing the trade; and

(v) transmitting from the trading system server to the trading client system an indication of whether the trade was refused or transacted and, if transacted, an indication of the price the trade was transacted at.

# E. Evidence

Petitioner filed a declaration from Bernard S. Donefer (Exhibit 1008) with its Petition. Patent Owner filed declarations from Ivan Zatkovich (Exhibit 2002) and one of the two named inventors of the '311 patent, Michael Stumm, Ph.D. (Exhibit 2005), with its Preliminary Response.

#### F. Asserted Ground

Petitioner challenges claims 1–7 of the '311 patent on the ground that the claims do not recite patent-eligible subject matter under 35 U.S.C. § 101. Pet. 4, 49–81.

#### II. ANALYSIS

#### A. Level of Ordinary Skill in the Art

Petitioner asserts that a person of ordinary skill in the art at the time of the '311 patent (March 2001) would have, "through education or practical experience, obtained a working knowledge of electronic trading systems from both the computer science and finance perspectives," including (1) "the equivalent of a bachelor's degree in computer science, information systems, or a related field, and at least two years of work experience developing electronic trading systems," and (2) "the equivalent of a bachelor's degree in finance, economics, or a related field, and . . . knowledge of computer systems" for electronic trading. Pet. 17 (citing Ex. 1008 ¶ 25). Patent Owner states that it agrees with Petitioner's proposed definition for purposes of its Preliminary Response. Prelim. Resp. 19. Based on the record presented, including our review of the '311 patent and the types of problems and solutions described in the '311 patent and cited reference materials, we agree with Petitioner's proposed definition of the level of ordinary skill in the art and apply it for purposes of this Decision. See, e.g., Ex. 1001, col. 1, ll. 20–46 (describing in the "Background" section of the '311 patent various aspects of a "traditional on-line currency market").

## B. Claim Interpretation

We interpret the challenged claims

using the same claim construction standard that would be used to construe the claim in a civil action under 35 U.S.C. 282(b), including construing the claim in accordance with the ordinary and customary meaning of such claim as understood by one of ordinary skill in the art and the prosecution history pertaining to the patent.

37 C.F.R. § 42.300(b) (2019). Petitioner argues that the terms of the challenged claims should be given their "ordinary and customary meaning," but does not propose express interpretations for any terms. Pet. 33. Patent Owner also does not propose any interpretations in its Preliminary Response. We conclude that no claim terms require express interpretation to determine whether to institute a covered business method patent review. *See Nidec Motor Corp. v. Zhongshan Broad Ocean Motor Co.*, 868 F.3d 1013, 1017 (Fed. Cir. 2017) ("Because we need only construe terms 'that are in controversy, and only to the extent necessary to resolve the controversy,' we need not construe [a particular claim limitation] where the construction is not 'material to the . . . dispute.'" (citation omitted)).

# C. Eligibility for Covered Business Method Patent Review

Section 18 of the Leahy-Smith America Invents Act, Pub. L. No. 112-29, 125 Stat. 284 (2011) ("AIA"), provides for the creation of a transitional program for reviewing covered business method patents, and limits reviews to persons or their privies that have been sued for

infringement or charged with infringement<sup>1</sup> of a "covered business method patent," which does not include patents for "technological inventions."<sup>2</sup> AIA §§ 18(a)(1)(B), 18(d)(1); *see* 37 C.F.R. § 42.302. Petitioner bears the burden of demonstrating that the '311 patent is a "covered business method patent." *See* 37 C.F.R. § 42.304(a).

# 1. Used in the Practice, Administration, or Management of a Financial Product or Service

A "covered business method patent" is "a patent that claims a method or corresponding apparatus for performing data processing or other operations used in the practice, administration, or management of a financial product or service, except that the term does not include patents for technological inventions." AIA § 18(d)(1); *see* 37 C.F.R. § 42.301(a). To determine whether a patent is eligible for covered business method patent review, the focus is on the claims. *See Unwired Planet, LLC v. Google Inc.*, 841 F.3d 1376, 1382 (Fed. Cir. 2016) ("[Covered business method patents] are limited to those with claims that are directed to methods and apparatuses of particular types and with particular uses 'in the practice, administration, or management of a financial product or service.'"); *Blue Calypso, LLC v. Groupon, Inc.*, 815 F.3d 1331, 1340 (Fed. Cir. 2016) (approving of prior Board decisions that "properly focuse[d] on the claim language at issue," and finding that the challenged patent was eligible for covered business method patent review because the claims recited "an express financial

<sup>&</sup>lt;sup>1</sup> Petitioner was sued for infringement of the '311 patent on May 11, 2020, in *OANDA Corp. v. GAIN Capital Holdings, Inc.*, No. 2:20-cv-5784 (D.N.J.). Pet. 2.

<sup>&</sup>lt;sup>2</sup> Petitioner filed its Petition on September 14, 2020, prior to the expiration of the transitional program.

component in the form of a subsidy" that was "central to the operation of the claimed invention"). A patent need have only one claim directed to a covered business method to be eligible for review. Transitional Program for Covered Business Method Patents—Definitions of Covered Business Method Patent and Technological Invention; Final Rule, 77 Fed. Reg. 48,734, 48,736 (Aug. 14, 2012).

Petitioner cites claims 1–7 of the '311 patent in support of its contention that the '311 patent is a covered business method patent, arguing that "[t]he financial nature of the claims is apparent from the claim language itself and confirmed by the [S]pecification." Pet. 36–37. Claim 1 recites a method of "trading currencies over a computer network" comprising "determining and dynamically maintaining a plurality of current exchange rates" where "each current exchange rate relat[es] to a pair of currencies" and includes first and second "price[s]" to buy and sell, respectively, "a first currency of the pair with respect to a second currency of the pair"; accepting input from a user identifying "a pair of currencies the user desires to trade, an amount of at least one currency of the pair desired to be traded and a requested trade price at which it is desired to effect the trade"; "comparing the requested trade price to the respective first price or second price of the corresponding current exchange rate at that time"; and "effecting" or "refusing" the trade.

We are persuaded that performing the recited steps pertaining to exchange rates, prices for buying and selling currencies, and accepting input from a user desiring to trade a pair of currencies constitutes providing a financial service. Patent Owner does not dispute Petitioner's arguments in its Preliminary Response, arguing only that the '311 patent is for a technological invention and thus is unavailable for covered business method

patent review. Prelim. Resp. 19–32. Petitioner has shown that at least claim 1 recites a method for performing data processing or other operations used in the practice, administration, or management of a financial product or service, as required by § 18(d)(1) of the AIA.

# 2. Technological Invention

The definition of "covered business method patent" in § 18(d)(1) of the AIA does not include patents for "technological inventions." To determine whether a patent is for a technological invention, we consider "whether the claimed subject matter as a whole [(1)] recites a technological feature that is novel and unobvious over the prior art; and [(2)] solves a technical problem using a technical solution." 37 C.F.R. § 42.301(b). In general, the Patent Trial and Appeal Board Consolidated Trial Practice Guide (Nov. 2019), *available at* https://www.uspto.gov/ TrialPracticeGuideConsolidated ("Trial Practice Guide"), provides the

following guidance with respect to claim content that typically does not exclude a patent under the category of a "technological invention":

(a) Mere recitation of known technologies, such as computer hardware, communication or computer networks, software, memory, computer-readable storage medium, scanners, display devices or databases, or specialized machines, such as an ATM or point of sale device.

(b) Reciting the use of known prior art technology to accomplish a process or method, even if that process or method is novel and non-obvious.

(c) Combining prior art structures to achieve the normal, expected, or predictable result of that combination.

*Id.* at 42–43. A claim does not include a "technological feature" if its "elements are nothing more than general computer system components used

to carry out the claimed process." *Blue Calypso*, 815 F.3d at 1341; *see also Versata Dev. Grp., Inc. v. SAP Am., Inc.*, 793 F.3d 1306, 1327 (Fed. Cir. 2015) ("the presence of a general purpose computer to facilitate operations through uninventive steps does not change the fundamental character of an invention").

For the technological invention exception to apply, both prongs (1) and (2) of the inquiry must be met affirmatively, meaning that a negative answer under either prong renders inapplicable the technological invention exception to covered business method patent review. *See Apple, Inc. v. Ameranth, Inc.*, 842 F.3d 1229, 1240 (Fed. Cir. 2016) ("We need not address this argument regarding whether the first prong of 37 C.F.R. § 42.301(b) was met, as we affirm the Board's determination on the second prong of the regulation—that the claimed subject matter as a whole does not solve a technical problem using a technical solution."); *Blue Calypso*, 815 F.3d at 1341 (addressing only whether the claimed invention solves a technical problem using a technical solution). We address the first prong herein, which is dispositive.

Petitioner argues that none of the challenged claims recite a technological feature that is novel and unobvious over the prior art, citing the testimony of Mr. Donefer as support. Pet. 38–42 (citing Ex. 1008  $\P\P$  83–86, 101–114, 116–152). With respect to claim 1 in particular, Petitioner discusses each step of the claim and contends that the steps "are performed by generic computers—a 'trading system server' and a 'trading client system.'" *Id.* at 38–40. Petitioner further points out that the Specification "confirms the generic nature of the computer components." *Id.* at 8, 40.

Claim 1 recites a "trading system server" connected to a "trading client system," with certain functionality performed "at" each device. The claim recites the trading system server "determining and dynamically maintaining" current exchange rates, "transmitting" "data" and an "indication" about the trade to the trading client system, and "comparing" prices (steps (i), (ii), (vi), and (vii)). The claim recites the trading client system "displaying" prices to a user, "accepting input from the user," and "transmitting" that input to the trading system server (steps (iii), (iv), and (v)). The Specification describes an exemplary trading system server that uses "*standard*, state-of-the-art database technology" to "maintain[] the accounts of all traders and execute[] trades issued by the traders" and includes a server front-end "encapsulat[ing] a *standard* Web server (a la Apache)" to communicate with the trading client system. Ex. 1001, col. 5, 11. 48–50, col. 6, 11. 25–27, 30–32, col. 6, 1. 65–col. 7, 1. 2 (emphasis added). The Specification further describes an exemplary trading client system where "[t]he end user interface to the Trading System is a Web page that can be displayed on any standard Java-enabled browser." Id. at col. 3, ll. 57-58 (emphasis added). We agree with Petitioner that the claim recites well-known computer components and known technologies for communicating information between those components, which indicates that the '311 patent is not a patent for a technological invention. See Trial Practice Guide, 42–43 (examples a and b).

Patent Owner argues that Petitioner fails to analyze claim 1 as a whole and that, when considered together, "the steps [of claim 1] reveal that [Patent Owner] is claiming a novel and unobvious system architecture capable of executing a new, different kind of currency trading order," citing the testimony of Mr. Zatkovich as support. Prelim. Resp. 20–23, 25–28

(citing Ex. 2002 ¶¶ 29, 32, 33, 36, 54–85, 88–91, 107–109). That order, which Patent Owner calls a "Market Order with Requested Price" (MORP), involves two communications (rather than three, as in the prior art) where the "trader specifies a price based on real-time price information and [] the system executes the order immediately and at that requested price." *Id.* at 2, 23 (emphasis omitted). Even assuming that the type of trading order described by Patent Owner is novel and unobvious over the prior art, however, we do not see why it would constitute a "technological feature," and Patent Owner has pointed us to no novel technical components in the claim constituting an unobvious system architecture that would carry out such a trading order. *See id.* at 22–23. Claim 1 recites a method, not a "system architecture" as Patent Owner contends. *See id.* at 20, 22–23, 27. And the only technical components in the claim are the generically recited "trading system server" and "trading client system."

Patent Owner further argues that Petitioner failed to provide "the requisite analysis or evidence demonstrating either anticipation or obviousness over the prior art," contrary to the requirements of 37 C.F.R. § 42.301(b). Prelim. Resp. 23–25. For purposes of the technological invention exception, we consider whether a claim, as a whole, recites a "technological feature" that is novel and unobvious over the prior art. 37 C.F.R. § 42.301(b). We do not agree that this requires Petitioner to assert and prove unpatentability of the claim under 35 U.S.C. §§ 102 or 103. The relevant question is not whether the claim is novel and unobvious, but rather whether the claim recites a "technological feature" that is novel and unobvious, but rather whether the claim recites a "technological feature" that is novel and unobvious, but rather whether the claim recites a "technological feature" that is novel and unobvious, but rather whether the claim recites a "technological feature" that is novel and unobvious, but rather whether the claim recites a "technological feature" that is novel and unobvious over the prior art. Claim 1 recites only two technical components, namely a "trading system server" and "trading client system," which communicate over a "computer network." The components are

recited in generic terms, and servers and client systems were plainly known in the prior art.

We agree with Petitioner that claim 1 does not recite a technological feature that is novel and unobvious over the prior art. Accordingly, we need not determine whether claim 1 solves a technical problem using a technical solution.

#### 3. Conclusion

For the foregoing reasons, we conclude that Petitioner has met its burden to show that the '311 patent is a "covered business method patent" and is eligible for covered business method patent review.

#### D. Legal Standards

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: "[1]aws of nature, natural phenomena, and abstract ideas" are not patentable. *E.g., 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, 69 (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 (1854))); and manufacturing flour (*Benson*, 409 U.S. at 69 (citing *Cochrane v. Deener*, 94 U.S. 780, 785 (1876))).

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 (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.* (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.* 

The Office published revised guidance on the application of § 101. 2019 Revised Patent Subject Matter Eligibility Guidance, 84 Fed. Reg. 50

(Jan. 7, 2019) ("Guidance").<sup>3</sup> Under the 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* MPEP § 2106.05(a)–(c), (e)–(h)).

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 Guidance, 84 Fed. Reg. at 56.

E. Asserted Ground Based on 35 U.S.C. § 101

1. Step 1: Statutory Category

Petitioner challenges claims 1–7 on the ground that the claims fail to

recite patent-eligible subject matter under 35 U.S.C. § 101.<sup>4</sup> Pet. 49–81.

<sup>&</sup>lt;sup>3</sup> We also have considered the October 2019 Patent Eligibility Guidance Update at https://www.uspto.gov/sites/default/files/documents/peg\_oct\_ 2019\_update.pdf.

<sup>&</sup>lt;sup>4</sup> Petitioner incorrectly argues that its "[P]etition demonstrates a reasonable likelihood that claims 1–7 are not directed to patent-eligible subject matter under 35 U.S.C. § 101." Pet. 2. We assume this to be a typographical error, as the correct standard for covered business method patent reviews is whether the information in the petition, if unrebutted, "would demonstrate that it is more likely than not that at least 1 of the claims challenged in the petition is unpatentable." 35 U.S.C. § 324(a).

We first determine "whether the claim is to a statutory category (Step 1)," namely a process, machine, manufacture, or composition of matter. Guidance, 84 Fed. Reg. at 53–54. Claims 1–7 of the '311 patent each recite a "method," which is a "process" that is statutory subject matter under § 101.

#### 2. Step 2A, Prong 1: Whether the Claims Recite an Abstract Idea

Under Step 2A, Prong 1 of the Guidance, we must determine whether the claims recite limitations that fall within any of the recognized categories of abstract ideas. The Guidance identifies certain groupings of abstract ideas that have been recognized under the case law: mathematical concepts, certain methods of organizing human activity, such as fundamental economic principles or practices, and mental processes. Guidance, 84 Fed. Reg. at 52. As part of this inquiry, we must examine the relevant limitations in the context of the claim language as a whole. Alice, 573 U.S. at 218 n.3. "The § 101 inquiry must focus on the language of the [a]sserted [c]laims themselves." Synopsys, Inc. v. Mentor Graphics Corp., 839 F.3d 1138, 1149 (Fed. Cir. 2016); Accenture Global Servs., GmbH v. Guidewire Software, Inc., 728 F.3d 1336, 1345 (Fed. Cir. 2013) ("[T]he important inquiry for a § 101 analysis is to look to the claim."). For the reasons that follow, we determine that Petitioner's identification of an alleged abstract idea of "currency trading" is so broad that it would encompass virtually any action of a trader, dealer, or partner in the currency trading field. We do not find sufficient justification for that approach.

Petitioner asserts that each one of the challenged claims is directed to "currency trading," which is a "fundamental economic practice." Pet. 49–50. According to Petitioner, all of the claims "broadly recite the steps of a standard currency trade—e.g., setting/communicating exchange

rates and receiving/processing orders—that were commonly practiced long before the introduction of computer-based trading." *Id.* at 49. With respect to claim 1, Petitioner argues that the claim "describes a standard currency trade in broad terms—prices are quoted, and orders are submitted and accepted (or not)—that encompass the core idea underlying the currency trading field." *Id.* at 10–12, 53–54. Petitioner further contends that "viewing prices and entering/submitting orders—including orders with trader specified prices—had long been common practice for currency traders, not to mention traders of numerous other asset types," and, therefore, steps (iii)–(v) of claim 1 are "a standard part of the same fundamental economic practice." *Id.* at 53–54.

Claim 7 is nearly identical to claim 1. The only difference between the claims is that steps (iii)–(v) of claim 1 recite limitations (e.g., "transmitting") from the perspective of the "trading client system," whereas step (iii) of claim 7 recites limitations (e.g., "receiving") from the perspective of the "trading system server." Both claims, though, recite the same input from a user of the trading client system: identification of "a pair of currencies the user desires to trade, an amount of at least one currency of the pair desired to be traded and a requested trade price at which it is desired to effect the trade."

With respect to claim 7, Petitioner argues that the steps of the claim generally describe (i) determining and maintaining exchange rates, (ii) transmitting an exchange rate to a client, (iii) receiving an order from client to execute a trade at particular price, (vi) comparing the requested price to the current market price and executing the trade (or not), and (vii) notifying the trader if the trade was executed.

*Id.* at 52. According to Petitioner, "[t]he additional verbiage [in the claim] merely describes other standard aspects of currency trading." *Id.* For example, Petitioner contends that "[t]he elements of the 'exchange rate' in step (i)—a currency pair associated with a buy and sell price—are the basic elements of a foreign exchange quote" and "[t]he user input received in step (iii)—a currency pair, an amount, and a price—merely describes the basic elements of an order." *Id.* Petitioner argues that "[v]iewed as a whole, this method describes the basic steps of conventional currency trades that were performed long before the introduction of computers: exchanges rates being set/stored/communicated to traders, traders submitting orders, and trades being executed." *Id.* at 52–53. Petitioner contends that steps (i) and (ii) are "simply what currency trade." *Id.* at 53. Petitioner relies on testimony from Mr. Donefer in support of its arguments. *See id.* at 10–12, 49–54 (citing Ex. 1008).

Patent Owner responds that Petitioner's assertion that the claims are all directed to "currency trading" "improperly describes the claims at too high a level of abstraction, as warned against in" *Enfish, LLC v. Microsoft Corp.*, 822 F.3d 1327, 1335, 1337 (Fed. Cir. 2016). Prelim. Resp. 33. Patent Owner argues that independent claims 1 and 7 instead are "directed to automated client-server systems for currency trading over a computer network, which accept trading orders including a requested trade price and either executing or refusing the trade depending on the corresponding current exchange rate." *Id.* at 34. According to Patent Owner, the claimed inventions implement the MORP order type and are different from "prior art computerized trading systems that only provide ordering from an order book, or traditional Market or Limit Orders." *Id.* 

Patent Owner describes this difference between the MORP order type and traditional order types as follows. A "request for quote (RFO) order" involves "a trader mak[ing] a request for a quote to a dealer for a pair of currencies" and engaging in the traditional "three-way handshake" process. Id. at 6–8. A "market order" is a type of order "in which a trader indicates a desire to buy or sell at the market price" and the trade "execute[s] at the foreign currency market price provided by the dealer at the time of the trade request, which may or may not be the price that was first quoted to the trader." Id. at 7. Delay between the original price quote to the trader and execution of the trade can "result[] in the trade settling at a price that is different from the quote." Id. Thus, "[o]nce the trader requests a Market Order, ... the trader has no ability to control the price at which the Market Order will execute." Id. A "limit order" is a type of order that executes if the current market rate "reaches a specified price, or limit." Id. "A trader does not have the ability to specify or control when the Limit Order executes, except for establishing parameters on when the Limit Order expires." Id. at 8.

Unlike a traditional RFQ order (involving the "three-way handshake" process), market order (where the trader has no control over the price at which the trade is executed), and limit order (where the trader has no control over when the trade will be executed), a MORP can be executed with just two communications and "allows the trader to control both the timing and the price of a trade." *Id.* at 13–16, 38–42; *see* Ex. 2002 ¶¶ 90 ("With a traditional Limit Order or Market Order, a trader can only control one variable of a trade—time or price. With a Market Order with Requested Price, . . . a trader can control the time AND price of execution of an order."), 91 (opining that "the two-way handshake invented and claimed by

[Patent Owner] . . . was innovative because it required only two, not three, steps, while *also* permitting the trader to control both the timing and the price of an order").

Patent Owner asserts that the parameters of the MORP order type are recited in claims 1 and 7. Prelim. Resp. 13-16. 41-42. Specifically, the trading system server "dynamically maintain[s]" current exchange rates and provides information to the trading client system, after which "the trader can use that current pricing information to issue a trade request." Id. at 13–14. "[U]nlike a traditional Market Order, the trader must specify a price (requested trade price) that is needed to effect the trade." Id. at 14. "The trading system server then compares the requested trading price with the current market price (current exchange rate at the time)." Id. "If the requested price is equal to or better than the current market price th[e] trade is immediately executed, otherwise it is rejected." Id. at 14-15. According to Patent Owner, the advantage of the MORP is that "very few MORPs will be rejected because the trader in this system is receiving real-time pricing information and knows exactly what the price is at the time the order is submitted." Id. at 15. Patent Owner relies on testimony from Mr. Zatkovich in support of its arguments. See id. at 6-8, 13-16, 33-34 (citing Ex. 2002 ¶¶ 23–26, 29–33, 80–85, 90, 91, 103, 104).

We primarily discuss claim 1 herein as representative, but our analysis applies equally to independent claims 1 and 7. As an initial matter, we note that Petitioner's articulation of the abstract idea to which challenged claims 1–7 are allegedly directed—"currency trading"—is extremely broad. Indeed, Petitioner in its Petition often characterizes currency trading not as

an abstract idea, but rather as a "field."<sup>5</sup> See, e.g., Pet. 5 ("the currency trading field"), 9 (same), 12 (same). Mr. Donefer does the same in his analysis. See, e.g., Ex. 1008 ¶¶ 27 (stating that he "cite[s] to contemporaneous publications describing market practices and various electronic systems that confirm [his] understanding, based on [his] experience, of the currency trading field before March 2001"), 29 (describing how "[t]he currency trading field [] developed alongside global finance"); see also id. ¶¶ 97, 100, 106, 111, 114, 118, 123 (opining that all of the steps of claim 1 were "standard" steps "that had long been conventional in the field" of currency trading). That treatment is consistent with the Specification of the '311 patent, which states in the "Field of the Invention" section of the patent that "[t]he present invention is related to currency trading." See Ex. 1001, col. 1, ll. 14–18.

The scope of the term "currency trading" also is inappropriately undefined based on the arguments in the Petition. In discussing the history of currency trading, Petitioner appears to define "currency trading" as simply "[e]xchanging one currency for another" or "two parties agreeing to trade a certain amount of one currency for a certain amount of another." Pet. 18–19 (citing Ex. 1008 ¶¶ 28–29, 32). In addressing the specific limitations of claims 1–7, however, Petitioner argues that currency trading has numerous "aspects," "parts," "standard part[s]," or "standard practice[s]" relating to, among other things, specific types of orders, price comparisons,

<sup>&</sup>lt;sup>5</sup> Petitioner makes similar arguments in its petition in related Case CBM2020-00023. *See GAIN Capital Holdings, Inc. v. OANDA Corp.*, CBM2020-00023, Paper 2 at 12 (PTAB Sept. 15, 2020) ("While the claims are not limited to any particular type of asset, the specification emphasizes *the currency trading field*, so [the petition] discusses currency trading and the relevance of trading models in *that field*." (emphasis added)).

and prices derived from various other prices and limit values. *See, e.g., id.* at 52–54, 57, 59, 61, 74–81. It is difficult to ascertain based on the arguments in the Petition any boundaries to what Petitioner considers to be "currency trading."

The breadth of Petitioner's alleged abstract idea and lack of articulated connection to any specific claim language is further demonstrated by the fact that Petitioner also alleges in related Case CBM2020-00022 that all 11 claims of the '336 patent are directed to the same abstract idea of "currency trading," despite those claims being very different from those of the '311 patent.<sup>6</sup> *See GAIN Capital Holdings, Inc. v. OANDA Corp.*, CBM2020-00022, Paper 2 at 51 (PTAB Sept. 15, 2020). For example, claim 1 of the '336 patent recites:

1. A system for trading currencies over a computer network, comprising:

(a) a server front-end in communication with said computer network;

(b) a database;

(c) a transaction server in communication with said server front-end and with said database;

(d) a rate server in communication with said server front-end; and

(e) a pricing engine in communication with said rate server; and further comprising an interest rate manager in communication with said transaction server and said database, wherein said interest rate manager is operative to calculate, pay out, and collect interest on a tick-by-tick basis.

Ex. 1002, col. 18, ll. 20–34. The claim recites various computer components in communication with each other. The only functionality recited in the

<sup>&</sup>lt;sup>6</sup> The '311 patent is a continuation of the '336 patent and shares the same Specification. *See* Ex. 1001, code (63).

claim is to "calculate, pay out, and collect interest" (unlike claim 1 of the '311 patent, which recites, among other things, functionality pertaining to exchange rates, a requested trade price, and specific price comparisons), yet Petitioner contends that it too is directed to the same abstract idea of "currency trading." *GAIN Capital*, CBM2020-00022, Paper 2 at 51, 53–55.

Beyond mere breadth of the alleged abstract idea, Petitioner's arguments are deficient because they do not adequately tie the alleged abstract idea to the language of the claim. Petitioner's position is that *all* of the steps of claim 1 recite the alleged abstract idea of "currency trading." Pet. 50–54. Petitioner does not explain sufficiently why that is the case, though.<sup>7</sup> For example, claim 1 recites the user of the trading client system identifying certain information, including "a requested trade price at which it is desired to effect the trade." The claim then recites

at the trading system server, comparing the requested trade price to the respective first price or second price of the corresponding current exchange rate at that time and, if the respective first price or second price of the corresponding current exchange rate at that time is equal to or better than the requested trade price, effecting the trade at the corresponding respective current exchange rate first price or second price and if the corresponding current exchange rate is worse than the requested trade price, refusing the trade.

Petitioner characterizes the "requested trade price" as merely one of "the basic elements of an order" and notes that "brokers commonly received limit

<sup>&</sup>lt;sup>7</sup> To be sure, the preamble of claim 1 recites "[a] method of trading currencies over a computer network." That, by itself, does not mean that all limitations of the claim recite an abstract idea of "currency trading," as Petitioner contends. We must look to the specific limitations of the claim, in the context of the claim as a whole, to determine whether they recite an abstract idea. Guidance, 84 Fed. Reg. at 52.

orders" specifying a price. *Id.* at 52–53 (citing Ex. 1008 ¶¶ 50, 107–111). Petitioner characterizes the recited comparison as "a standard economic decision underlying any trade," stating that it was a "standard practice for brokers to compare the requested price, *i.e.* the limit price, to currently available prices to determine whether the trade could be executed." *Id.* (citing Ex. 1008 ¶¶ 71, 115–118); *see also id.* at 39 (asserting that steps (iii)–(v) of claim 1 "encompass[] the basic elements of a limit order").

Nothing in Petitioner's alleged abstract idea of "currency trading," however, includes any decision-making. Indeed, to the extent "currency trading" refers merely to the actual exchange of one currency for another, as Petitioner argues early in its Petition, any comparison of prices would take place prior to the exchange, and "refusing the trade" under certain circumstances would be not performing an exchange at all. *See id.* at 18.

Moreover, Petitioner's alleged abstract idea fails to account for the specific comparison and decision-making recited in the claim. Contrary to Petitioner's arguments analogizing claim 1 to a traditional limit order, claim 1 does not recite merely determining whether the current market rate has reached a specified limit, as would be the case for a traditional limit order. *See id.* at 39, 52–53; Ex. 1008 ¶ 50 (Mr. Donefer testifying that a limit order "is executed if and when" the price reaches the trader's specified limit); Ex. 2002 ¶¶ 33 (Mr. Zatkovich similarly testifying that a limit order "will execute when the Spot Rate reaches a specified price, or limit"), 35 (testifying that with limit orders, the trading system server must be "capable of enqueueing the trader's orders and checking them from time to time to see if the limits have been satisfied"), 67 (testifying that limit orders "remain pending until the requested limit . . . price is reached"). Rather, as Patent Owner correctly points out, claim 1 recites the trading system server

"dynamically maintaining" exchange rates and providing such information to the trading client system, the user of the trading client system identifying "a requested trade price at which it is desired to effect the trade," and the trading system server comparing the requested trade price to a specified price of the "current exchange rate at that time." *See* Prelim. Resp. 13–16 (emphasis omitted). If the specified price is "equal to or better" than the requested trade price, the trade is effected, but if it is "worse" than the requested trade price, the trade is refused. *Id.* Thus, even if "currency trading" can be considered to include the characteristics of a traditional limit order, Petitioner has not explained sufficiently why the claim recites that type of order. We agree with Patent Owner that claim 1, as a whole, recites more than a traditional limit order. *See id.* 

Petitioner analogizes "currency trading" to "intermediated settlement" and "risk hedging," which were found to be patent-ineligible abstract ideas in *Alice* and *Bilski*. Pet. 49–50. "Currency trading" is much broader than either of those concepts, however, which involved certain sequences of steps that each constituted a fundamental economic practice. *See Alice*, 573 U.S. at 218–220; *Bilski*, 561 U.S. at 599, 611–612. Petitioner in its Petition refers to "currency trading" not as the actual exchange of one currency for another, but as a collection of practices allegedly performed by those in the currency trading field. *See* Pet. 50–54. Again, Petitioner's recitation of an alleged abstract idea of "currency trading" appears to be so broad that it would encompass virtually any action of a trader, dealer, or partner in the field.

Our reviewing court has cautioned that characterizing claims at a "high level of abstraction and untethered from the language of the claims all but ensures that the exceptions to § 101 swallow the rule." *Enfish*, 822 F.3d at 1337. "[W]e must be careful to avoid oversimplifying the claims because

[a]t some level, all inventions . . . embody, use, reflect, rest upon, or apply laws of nature, natural phenomena, or abstract ideas." *In re TLI Comm'cns LLC Patent Litig.*, 823 F.3d 607, 611 (Fed. Cir. 2016) (quoting *Alice*, 573 U.S. at 217) (internal quotation marks omitted). "We must therefore ensure at step one that we articulate what the claims are directed to with enough specificity to ensure the step one inquiry is meaningful." *Thales Visionix Inc. v. United States*, 850 F.3d 1343, 1347 (Fed. Cir. 2017). The focus of the § 101 inquiry is on the specific language of the claims themselves. *Synopsys*, 839 F.3d at 1149; *Accenture*, 728 F.3d at 1345.

Prior Board decisions in post-grant proceedings have found § 101 arguments deficient in similar circumstances where the petitioner asserted an over-generalized abstract idea and failed to sufficiently tie that alleged idea to the language of the claims. See, e.g., Yahoo! Inc. v. AlmondNet, Inc., CBM2017-00046, Paper 8 at 14 (PTAB Oct. 16, 2017) (concluding that the petitioner's asserted abstract idea of "securing revenue from advertising" over-generalized the claims, as the petitioner failed to explain how multiple concepts recited in the claims are "embodied in [the p]etitioner's alleged abstract idea"); Yahoo! Inc. v. AlmondNet, Inc., CBM2017-00047, Paper 8 at 14 (PTAB Oct. 16, 2017) (same); Ultratec, Inc. v. CaptionCall, L.L.C., PGR2016-00037, Paper 10 at 15 (PTAB Feb. 22, 2017) ("Petitioner's approach is predicated on discussing the claim at a high level of abstraction and virtually unterhered to the language of the claim, an approach that we find unpersuasive."); Plaid Techs., Inc. v. Yodlee, Inc., CBM2016-00045, Paper 7 at 14 (PTAB Aug. 23, 2016) ("[W]e agree with Patent Owner that Petitioner's proffered assertion that the claims of the [challenged] patent are directed to retrieving and storing personal information is an impermissible over-generalizing of the claims."); JP Morgan Chase & Co. v. Maxim

Integrated Prods., Inc., CBM2014-00179, Paper 11 at 35 (PTAB Feb. 20, 2015) ("[W]e agree with Patent Owner that Petitioner, in asserting the claims are directed to the abstract idea of secure data transfer, seeks to take the claims to [a] higher level of abstraction than is warranted."); *Google Inc. v. SimpleAir, Inc.*, CBM2014-00170, Paper 13 at 16 (PTAB Jan. 22, 2015) ("[E]very method can be generalized to the point of abstraction if the claim language is ignored. Here, Petitioner overlooks the various physical components recited by the claims . . . .").

We conclude the same here. Petitioner proposes an extremely broad abstract idea of "currency trading" of unclear scope and does not explain sufficiently why claim 1 is directed to that alleged abstract idea. At minimum, Petitioner does not explain sufficiently why the recited comparison and associated decision-making should be considered part of the idea of "currency trading." Petitioner's articulation of the alleged abstract idea fails to account for the specific steps recited in the claim.<sup>8</sup> Of course, we could perform our own evaluation as to whether (and what) limitations of the claim recite an abstract idea, and if so, what exactly that idea is. The burden is on Petitioner, however, to establish that it is more likely than not that at least one of the challenged claims is unpatentable, and any *sua sponte* evaluation made by the Board would be divorced from the evidence and analysis offered by Petitioner, to the detriment of Patent Owner. *See* 35 U.S.C. § 324(a); *SAS Inst., Inc. v. Iancu*, 138 S.Ct. 1348, 1356–57 (2018) (concluding that based on the language of 35 U.S.C. §§ 314 and 318, which

<sup>&</sup>lt;sup>8</sup> Because we determine that Petitioner has not made a sufficient showing for the reasons stated herein, we need not decide other issues presented by the Petition and Patent Owner's arguments in the Preliminary Response, such as whether the claims include an inventive concept under Step 2B.

mirror the statutory language applicable to covered business method patent reviews, it is "the petitioner's contentions" that "define the scope of the litigation all the way from institution through to conclusion").

With respect to the remaining claims, claims 1 and 7 recite very similar limitations, including the "requested trade price" identified by the trading client system user and "comparing" step performed by the trading system server. We are not persuaded by Petitioner's arguments regarding claim 7 for the same reasons explained above regarding claim 1. *See* Pet. 50–54. Claims 2–6 depend from claim 1. Accordingly, Petitioner has not shown that claims 1–7 are more likely than not unpatentable as claiming patent-ineligible subject matter under § 101.

#### III. CONCLUSION

Based on the arguments presented in the Petition, we conclude that Petitioner has not demonstrated that it is more likely than not that any of claims 1–7 of the '311 patent are unpatentable. Therefore, we do not institute a covered business method patent review.

#### IV. ORDER

In consideration of the foregoing, it is hereby:

ORDERED that the Petition is denied and no covered business method patent review is instituted.

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