



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
14/453,547	08/06/2014	Michael TESTA	INDE/0012USC1	4377
107456	7590	06/10/2020	EXAMINER	
Artegis Law Group, LLP John Carey 7710 Cherry Park Drive Suite T #104 Houston, TX 77095			SHAIKH, MOHAMMAD Z	
			ART UNIT	PAPER NUMBER
			3694	
			NOTIFICATION DATE	DELIVERY MODE
			06/10/2020	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

jmatthews@artegislaw.com
kcruz@artegislaw.com
sjohnson@artegislaw.com

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

Ex parte MICHAEL TESTA, VIKAS SRIVASTAVA, and
MICHELLE YIP CHEN

Appeal 2020-001000
Application 14/453,547
Technology Center 3600

Before JASON J. CHUNG, CARL L. SILVERMAN, and
JAMES W. DEJMEK, *Administrative Patent Judges*.

DEJMEK, *Administrative Patent Judge*.

DECISION ON APPEAL

Appellant¹ appeals under 35 U.S.C. § 134(a) from a Final Rejection of claims 1–16 and 27. Appellant has canceled claims 17–26. Appeal Br. 29. We have jurisdiction over the remaining pending claims under 35 U.S.C. § 6(b).

We affirm.

¹ Throughout this Decision, we use the word “Appellant” to refer to “applicant” as defined in 37 C.F.R. § 1.42 (2018). Appellant identifies INTEGRAL DEVELOPMENT CORPORATION as the real party in interest. Appeal Br. 3.

STATEMENT OF THE CASE

Introduction

Appellant’s disclosed and claimed invention generally relates to “an exchange system and associated applications to facilitate FX [(foreign exchange)] transactions in which trades are netted, executed, and distributed in a fair manner.” Spec. ¶ 14. According to the Specification, “[n]etting’ refers to offsetting of buys and sells of like instruments against each other to reduce the market amount of trades.” Spec. ¶ 70. In a disclosed embodiment, a plurality of trade requests (which may specify a currency pair, base currency amount, and a term currency amount) may be received by an exchange system. Spec. ¶ 20. The received trades may be organized by currency pair to determine trade amounts that may be processed internally (i.e., trade netting). Spec. ¶¶ 21–22. Trades not subject to internal processing may be executed on the market. Spec. ¶¶ 23, 26. In addition, the exchange system may present to a user a plurality of netting plans that account for transactional costs associated with each plan. Spec. ¶¶ 71–74.

Claims 1, 9, and 27 are independent claims. Claim 27 is representative of the subject matter on appeal (*see* 37 C.F.R. § 41.37(iv)) and is reproduced below:

27. A method for providing selectable trading plans to a user, the method comprising:

generating a plurality of netting plans associated with one or more trades, wherein each netting plan represents a different strategy for offsetting at least one trade included in the one or more trades organized by currency pairs against at least one other trade included in the one or more trades organized by currency pairs, wherein offsetting the at least one trade against the at least one other trade comprises conducting the at least one trade and the at least one other trade internally within an exchange system

to reduce a value of a market trade related to the one or more trades, wherein the market trade is conducted externally by the exchange system via one or more external parties, and at least one netting plan in the plurality of netting plans includes a trade cross between a first currency and a second currency via one or more intermediate currencies and a residual trade to eliminate residual values remaining in the one or more intermediate currencies after the trade cross;

estimating, for each netting plan included in the plurality of netting plans, a corresponding total cost associated with executing the one or more trades according to the respective netting plan,

causing the plurality of netting plans and the total cost corresponding to each netting plan to be concurrently to be displayed in a display region of a trading platform interface, wherein the plurality of netting plans in the display region are individually selectable via user interactions selecting to perform trades according to a selected netting plan;

causing a representation of a refresh command to be displayed in the display region of the trading platform interface concurrently with the plurality of netting plans and the total cost corresponding to each netting plan;

receiving a user interaction from the trading platform interface selecting the representation of the refresh command;
and

automatically updating, for each netting plan included in the plurality of netting plans, the corresponding total cost displayed in the display region and associated with executing the one or more trades according to the respective netting plan based on a current market rate.

Appeal Br. 30–31 (Claims Appendix).

The Examiner's Rejection

Claims 1–16 and 27 stand rejected under 35 U.S.C. § 101 as being directed to patent-ineligible subject matter. Final Act. 21–25.

ANALYSIS²

The Supreme Court’s two-step framework guides our analysis of patent eligibility under 35 U.S.C. § 101. *Alice Corp. v. CLS Bank Int’l*, 573 U.S. 208, 217 (2014). In addition, the Office has published revised guidance for evaluating subject matter eligibility under 35 U.S.C. § 101, specifically with respect to applying the *Alice* framework. USPTO, 2019 Revised Patent Subject Matter Eligibility Guidance, 84 Fed. Reg. 50 (Jan. 7, 2019) (“Office Guidance”). If a claim falls within one of the statutory categories of patent eligibility (i.e., a process, machine, manufacture, or composition of matter) then the first inquiry is whether the claim is directed to one of the judicially recognized exceptions (i.e., a law of nature, a natural phenomenon, or an abstract idea). *Alice*, 573 U.S. at 217. As part of this inquiry, we must “look at the ‘focus of the claimed advance over the prior art’ to determine if the claim’s ‘character as a whole’ is directed to excluded subject matter.” *Affinity Labs of Tex., LLC v. DIRECTV, LLC*, 838 F.3d 1253, 1257–58 (Fed. Cir. 2016). Per Office Guidance, this first inquiry has two prongs of analysis: (i) does the claim recite a judicial exception (e.g., an abstract idea), and (ii) if so, is the judicial exception integrated into a practical application. 84 Fed. Reg. at 54. Under the Office Guidance, if the judicial exception is integrated into a practical application, *see infra*, the claim passes muster under § 101. 84 Fed. Reg. at 54–55. If the claim is directed to a judicial exception (i.e., recites a judicial exception and does not integrate the

² Throughout this Decision, we have considered the Appeal Brief, filed July 29, 2019 (“Appeal Br.”); the Reply Brief, filed November 18, 2019 (“Reply Br.”); the Examiner’s Answer, mailed September 16, 2019 (“Ans.”); and the Final Office Action, mailed January 31, 2019 (“Final Act.”), from which this Appeal is taken.

exception into a practical application), the next step is to determine whether any element, or combination of elements, amounts to significantly more than the judicial exception. *Alice*, 573 U.S. at 217; 84 Fed. Reg. at 56.

Appellant disputes the Examiner's conclusion that the pending claims are directed to patent-ineligible subject matter. Appeal Br. 13–20; Reply Br. 3–11. In particular, Appellant argues that under the Office Guidance, the claims do not fall into any of the identified groupings of abstract ideas (i.e., mathematical concepts, mental processes, or certain methods of organizing human activity). Appeal Br. 13–14; Reply Br. 3–4. Specifically, Appellant argues that because the claims provide for computer activity that cannot be performed by a human, the claims cannot be directed towards organizing human activity. Appeal Br. 13–14; Reply Br. 3–4. Further, Appellant argues that even if the claims did recite one of the recognized groupings of abstract ideas, the claims further recite additional elements that integrate the alleged abstract idea into a practical application. Appeal Br. 14–19; Reply Br. 4–9. In addition, Appellant challenges the Examiner's findings that the claims recite computer functions that are well-understood, routine, and conventional. Appeal Br. 19–20; Reply Br. 9–10.

Contrary to Appellant's assertions, we conclude Appellant's claims recite an abstract idea. More specifically, Appellant's claims are generally directed to generating and updating a plurality of netting plans, including an estimated cost of execution, associated with one or more trades (i.e., foreign exchange transactions). This is consistent with how Appellant describes the claimed invention. *See Spec.* ¶¶ 14–15, 19–22, Abstract; Appeal Br. 13–15 (“the claims are directed towards techniques for generating different netting plans, estimating a total cost associated with each netting plan, and

displaying these netting plans and total costs to a user via an interface”). Generating and updating a plurality of netting plans, including an estimated cost of execution, associated with one or more trades (i.e., foreign exchange transactions) is a certain method of organizing human activity (e.g., a fundamental economic practice)—i.e., an abstract idea. *See* 84 Fed. Reg. at 52; *see also Alice*, 573 U.S. at 219–20 (concluding that use of a third party to mediate settlement risk is a “fundamental economic practice” and thus, an abstract idea); *Bilski v. Kappos*, 561 U.S. 593, 611–12 (2010) (concluding hedging to be a fundamental economic practice and, therefore, an abstract idea); *Inventor Holdings, LLC v. Bed Bath & Beyond, Inc.*, 876 F.3d 1372, 1378–79 (Fed. Cir. 2017) (concluding the pending claims were directed to the local processing of payments for remotely purchased goods to be abstract).

Claim 27 is reproduced below and includes the following claim limitations that recite generating and updating a plurality of netting plans, including an estimated cost of execution, associated with one or more trades (i.e., foreign exchange transactions), emphasized in *italics*:

27. A method for providing selectable trading plans to a user, the method comprising:

generating a plurality of netting plans associated with one or more trades, wherein each netting plan represents a different strategy for offsetting at least one trade included in the one or more trades organized by currency pairs against at least one other trade included in the one or more trades organized by currency pairs, wherein offsetting the at least one trade against the at least one other trade comprises conducting the at least one trade and the at least one other trade internally within an exchange system to reduce a value of a market trade related to the one or more trades, wherein the market trade is conducted externally by the exchange system via one or more external parties, and at least

one netting plan in the plurality of netting plans includes a trade cross between a first currency and a second currency via one or more intermediate currencies and a residual trade to eliminate residual values remaining in the one or more intermediate currencies after the trade cross;

estimating, for each netting plan included in the plurality of netting plans, a corresponding total cost associated with executing the one or more trades according to the respective netting plan,

causing the plurality of netting plans and the total cost corresponding to each netting plan to be concurrently to be displayed in a display region of a trading platform interface, wherein the plurality of netting plans in the display region are individually selectable via user interactions selecting to perform trades according to a selected netting plan;

causing a representation of a refresh command to be displayed in the display region of the trading platform interface concurrently with the plurality of netting plans and the total cost corresponding to each netting plan;

receiving a user interaction from the trading platform interface selecting the representation of the refresh command;
and

automatically updating, for each netting plan included in the plurality of netting plans, the corresponding total cost displayed in the display region and associated with executing the one or more trades according to the respective netting plan based on a current market rate.

More particularly, the above demonstrates the concept of generating and updating a plurality of netting plans, including an estimated cost of execution, associated with one or more trades (i.e., foreign exchange transactions) comprises (i) generating a plurality of netting plans associated with one or more trades (i.e., the claimed generating step); (ii) including an estimated cost of execution for each netting plan (i.e., the claimed estimating step); and (iii) updating the netting plans to account for current market rates

(i.e., the claimed automatically updating step). We conclude that generating and updating a plurality of netting plans, including an estimated cost of execution, associated with one or more trades (i.e., foreign exchange transactions) is a fundamental economic practice (i.e., a certain method of organizing human activity and, therefore, an abstract idea). *Compare* Spec. ¶ 14 (describing participation in the foreign exchange markets and foreign exchange transactions as part of an active hedging strategy), *with Bilski*, 561 U.S. at 611–12 (concluding hedging to be a fundamental economic practice).

Because the claim recites a judicial exception, we next determine whether the claim integrates the judicial exception into a practical application. 84 Fed. Reg. at 54. To determine whether the judicial exception is integrated into a practical application, we identify whether there are “*any additional elements recited in the claim beyond the judicial exception(s)*” and evaluate those elements to determine whether they integrate the judicial exception into a recognized practical application. 84 Fed. Reg. at 54–55 (emphasis added); *see also* Manual of Patent Examining Procedure (“MPEP”) § 2106.05(a)–(c), (e)–(h) (9th ed. Rev. 08.2017, Jan. 2018).

Here, we find the additional limitation(s) do not integrate the judicial exception into a practical application. In particular, the claims do not recite (i) an improvement to the functionality of a computer or other technology or technical field (*see* MPEP § 2106.05(a)); (ii) use a “particular machine” to apply or use the judicial exception (*see* MPEP § 2106.05(b)); (iii) a particular transformation of an article to a different thing or state (*see* MPEP § 2106.05(c)); or (iv) any other meaningful limitation (*see* MPEP § 2106.05(e)). *See* 84 Fed. Reg. at 55.

More particularly, the additional limitations merely provide additional detail to the generated netting plans (i.e., that at least one trade is conducted internally, and at least one plan includes a trade cross via one or more intermediate currencies and a residual trade). Any purported improvement, however, relates to the abstract idea, and does not improve a computer, technology, or a technical field. *See McRO, Inc. v. Bandai Namco Games Am. Inc.*, 837 F.3d 1299, 1314 (Fed. Cir. 2016) (“We . . . look to whether the claims in these patents focus on a specific means or method that improves the relevant technology or are instead directed to a result or effect that itself is the abstract idea and merely invoke generic processes and machinery.”) (citing *Enfish, LLC v. Microsoft Corp.*, 822 F.3d 1327, 1336 (Fed. Cir. 2016)). Further, the additional limitations relate to displaying the generating netting plans in a display region of a trading platform interface, displaying a representation of a refresh command, receiving a user interaction to refresh the netting plans using the most current market information, and again displaying the (updated) netting plans. Receiving user input and displaying the results of the netting plan generation step (as well as displaying a refresh command) are extra-solutions activities that do not confer patent eligibility. *See, e.g., Elec. Power Grp., LLC v. Alstom S.A.*, 830 F.3d 1350, 1355 (Fed. Cir. 2016) (explaining that “selecting information, by content or source, for collection, analysis, and display does nothing significant to differentiate a process from ordinary mental processes”); *Elec. Power*, 830 F.3d at 1354 (recognizing “that merely presenting the results of abstract processes of collecting and analyzing information, without more (such as identifying a particular tool for presentation), is abstract as an ancillary part of such collection and analysis”); *Intellectual Ventures I LLC v. Capital One Fin.*

Corp., 850 F.3d 1332, 1340 (Fed. Cir. 2017) (determining that the pending claims were directed to “collecting, displaying, and manipulating data,” and, accordingly, patent-ineligible).

Contrary to Appellant’s assertions (*see, e.g.*, Appeal Br. 14–19), the claims do not provide a technical improvement to a graphical user interface. Rather, the claims merely use a conventional graphical user interface to display specific information (e.g., netting plans). Further, the claims do not provide a technical solution to a technical problem arising in the field of trading computing systems. *See* Appeal Br. 19. Instead, as Appellant explains in the Specification, the inputting of trade information may be performed manually using techniques known in the art. Spec. ¶ 68; *see also* Spec. ¶¶ 25, 28.

In addition, Appellant’s reliance (*see* Appeal Br. 15–17) on *Core Wireless*³ is unavailing. In *Core Wireless*, the court concluded the claims were not directed to an abstract idea, but rather were “directed to an improved user interface for computing devices.” *Core Wireless*, 880 F.3d at 1362. More particularly, the court noted it was clear that the “claims are directed to *an improvement in the functioning of computers, particularly those with small screens.*” *Core Wireless*, 880 F.3d at 1363 (emphasis added). Here, the claims do not provide a solution to a technical limitation of a graphical user interface, but merely use the graphical user interface to display the generated and updated netting plans (as well as a refresh option). The use of a refresh command to use current market rates is not an improvement to the graphical user interface, but rather to the end user (i.e.,

³ *Core Wireless Licensing S.A.R.L. v. LG Elecs., Inc.*, 880 F.3d 1356 (Fed. Cir. 2018).

to use the most up-to-date market information). *See also Trading Techs. Int'l, Inc. v. IBG LLC*, 921 F.3d 1084, 1093 (Fed. Cir. 2019) (distinguishing between an alleged improvement to the way a computer operates versus an improvement to assist the end user).

Moreover, in *DDR Holdings*,⁴ the Federal Circuit determined “the claimed solution amount[ed] to an inventive concept for resolving [a] particular Internet-centric problem,” i.e., a challenge unique to the Internet. *DDR Holdings*, 773 F.3d at 1257–59; *see Synopsys, Inc. v. Mentor Graphics Corp.*, 839 F.3d 1138, 1151 (Fed. Cir. 2016) (noting that “[i]n *DDR Holdings*, we held that claims ‘directed to systems and methods of generating a composite web page that combines certain visual elements of a ‘host’ website with content of a third-party merchant’ contained the requisite inventive concept”). The Federal Circuit explained that the patent-eligible claims specified “how interactions with the Internet are manipulated to yield a desired result . . . that overrides the routine and conventional sequence of events ordinarily triggered by the click of a hyperlink.” *DDR Holdings*, 773 F.3d at 1258. The court reasoned that those claims recited a technological solution “necessarily rooted in computer technology” that addressed a “problem specifically arising in the realm of computer networks.” *DDR Holdings*, 773 F.3d at 1257. Here, unlike the claims at issue in *DDR Holdings*, Appellant’s claims rely on a “computer network [(i.e., exchange system)] operating in its normal, expected manner.” *DDR Holdings*, 773 F.3d at 1258–59; *see also Spec.* ¶¶ 53–60, 94–96.

Because we do not find the claims provide a technological improvement as discussed above, for similar reasons, we do not find

⁴ *DDR Holdings, LLC v. Hotels.com, L.P.*, 773 F.3d 1245 (Fed. Cir. 2014).

Appellant’s reliance (*see* Appeal Br. 18) on *Finjan*,⁵ *McRO*,⁶ or *Visual Memory*⁷ persuasive. *See also* Ans. 12–14.

For at least the foregoing reasons, the claims do not integrate the judicial exception into a practical application.

Because we determine the claims are directed to an abstract idea or combination of abstract ideas, we analyze the claims under step two of *Alice* to determine if there are additional limitations that individually, or as an ordered combination, ensure the claims amount to “significantly more” than the abstract idea. *Alice*, 573 U.S. at 217–18 (citing *Mayo*, 566 U.S. at 77–79). As stated in the Office Guidance, many of the considerations to determine whether the claims amount to “significantly more” under step two of the *Alice* framework are already considered as part of determining whether the judicial exception has been integrated into a practical application. *See* 84 Fed. Reg. at 56. Thus, at this point of our analysis, we determine if the claims add a specific limitation, or combination of limitations, that is not well-understood, routine, conventional activity in the field, or simply appends well-understood, routine, conventional activities at a high level of generality. *See* 84 Fed. Reg. at 56.

Here, Appellant’s claims do not recite specific limitations (or a combination of limitations) that are not well-understood, routine, and conventional. Instead, the computer components (e.g., memory, processor, reception module, trade organization module, and trade netting module) and

⁵ *Finjan, Inc. v. Blue Coat Sys., Inc.*, 879 F.3d 1299 (Fed. Cir. 2018).

⁶ *McRO, Inc. v. Bandai Namco Games Am. Inc.*, 837 F.3d 1299 (Fed. Cir. 2016).

⁷ *Visual Memory LLC v. NVIDIA Corp.*, 867 F.3d 1253 (Fed. Cir. 2017).

functions (e.g., receiving information over a network, organizing data, displaying data, and receiving user input) are recited and described at a high level of generality. *See, e.g.*, Spec. ¶¶ 53–60, 94–97. As the Examiner finds (*see* Ans. 17–18), the recited components and functions are well-understood, routine, and conventional. Consistent with the *Berkheimer* Memorandum,⁸ we agree with the Examiner’s findings that the claims merely recite generic computer components (e.g., a computing device comprising a processor and memory) performing generic computing functions that are well-understood, routine, and conventional (e.g., receiving data, processing data, and presenting the results of the data processing). *See Mortg. Grader, Inc. v. First Choice Loan Servs. Inc.*, 811 F.3d 1314, 1324–25 (Fed. Cir. 2016) (generic computer components, such as an “interface,” “network,” and “database,” fail to satisfy the inventive concept requirement); *Alice*, 573 U.S. at 226 (“Nearly every computer will include a ‘communications controller’ and [a] ‘data storage unit’ capable of performing the basic calculation, storage, and transmission functions required by the method claims.”); *buySAFE, Inc. v. Google, Inc.*, 765 F.3d 1350, 1355 (Fed. Cir.

⁸ On April 19, 2018, the Deputy Commissioner for Patent Examination Policy issued a memorandum entitled: Changes in Examination Procedure Pertaining to Subject Matter Eligibility, Recent Subject Matter Eligibility Decision (*Berkheimer v. HP, Inc.*) (i.e., “the *Berkheimer* Memorandum”) (discussing the *Berkheimer* decision) (available at <https://www.uspto.gov/sites/default/files/documents/memo-berkheimer-20180419.PDF>). Support for a finding that an element was well-understood, routine, or conventional may be shown by citation to one or more court decisions noting the well-understood, routine, conventional nature of the element(s). *See Berkheimer* Memorandum 3–4.

2014) (“That a computer receives and sends the information over a network—with no further specification—is not even arguably inventive.”).

Further, to the extent Appellant is asserting a lack of rejection under Sections 102 and/or 103 suggests the instant claims do not recite well understood, routine, or conventional activities or, otherwise, recite an inventive concept (*see, e.g.*, Appeal Br. 19–20; Reply Br. 9–10), we are not persuaded. Subject-matter eligibility under 35 U.S.C. § 101 is a requirement separate from other patentability inquiries. *See Mayo*, 566 U.S. at 90 (recognizing that the § 101 inquiry and other patentability inquiries “might sometimes overlap,” but that “shift[ing] the patent-eligibility inquiry entirely to these [other] sections risks creating significantly greater legal uncertainty, while assuming that those sections can do work that they are not equipped to do”); *see also Diehr*, 450 U.S. at 188–89 (“[t]he ‘novelty’ of any element or steps in a process, or even of the process itself, is of no relevance in determining whether the subject matter of a claim falls within the § 101 categories of possibly patentable subject matter”); *Ass’n for Molecular Pathology v. Myriad Genetics, Inc.*, 569 U.S. 576, 591 (2013) (“[G]roundbreaking, innovative, or even brilliant discovery does not by itself satisfy the § 101 inquiry.”); *Two-Way Media Ltd. v. Comcast Cable Commc’ns, LLC*, 874 F.3d 1329, 1340 (Fed. Cir. 2017) (“[e]ligibility and novelty are separate inquiries”).

Additionally, to the extent Appellant contends the claims do not seek to preempt an abstract idea (*see* Appeal Br. 20), we are unpersuaded of Examiner error. “[W]hile preemption may signal patent ineligible subject matter, the absence of complete preemption does not demonstrate patent eligibility.” *FairWarning IP*, 839 F.3d at 1098 (quoting *Ariosa*

Diagnostics, Inc. v. Sequenom, Inc., 788 F.3d 1371, 1379 (Fed. Cir. 2015)); *see also OIP Techs., Inc. v. Amazon.com, Inc.*, 788 F.3d 1359, 1362–63 (Fed. Cir. 2015) (“[T]hat the claims do not preempt all price optimization or may be limited to price optimization in the e-commerce setting do not make them any less abstract.”). Further, “[w]here a patent’s claims are deemed only to disclose patent ineligible subject matter under the *Mayo* framework, as they are in this case, preemption concerns are fully addressed and made moot.” *Ariosa*, 788 F.3d at 1379.

For the reasons discussed *supra*, we sustain the Examiner’s rejection of claims 1–16 and 27 under 35 U.S.C. § 101.

CONCLUSION

We affirm the Examiner’s decision rejecting claims 1–16 and 27 under 35 U.S.C. § 101.

DECISION SUMMARY

Claims Rejected	35 U.S.C. §	Reference(s)/Basis	Affirmed	Reversed
1–16, 27	101	Patent Eligibility	1–16, 27	

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. § 41.50(f).

AFFIRMED