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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
13/917,230	06/13/2013	Thomas P. Anderson	3820	4783
98580	7590	09/27/2019	EXAMINER	
Vitale, Vickrey, Niro & Gasey LLP 311 S. Wacker Drive Suite 2470 Chicago, IL 60606			MADAMBA, CLIFFORD B	
			ART UNIT	PAPER NUMBER
			3692	
			MAIL DATE	DELIVERY MODE
			09/27/2019	PAPER

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BEFORE THE PATENT TRIAL AND APPEAL BOARD

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*Ex parte* THOMAS P. ANDERSON

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Appeal 2017–009823  
Application 13/917,230<sup>1</sup>  
Technology Center 3600

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Before HUBERT C. LORIN, JOSEPH A. FISCHETTI, and  
AMEE A. SHAH, Administrative Patent Judges.

LORIN, *Administrative Patent Judge*.

DECISION ON APPEAL

STATEMENT OF THE CASE

Thomas P. Anderson (Appellant) seeks our review under 35 U.S.C. § 134(a) of the Final Rejection of claims 1–7 and 10–15. We have jurisdiction under 35 U.S.C. § 6(b).

SUMMARY OF DECISION

We AFFIRM.

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<sup>1</sup> The Appellant identifies the Application's inventor, Thomas P. Anderson as the real party in interest. Br. 1.

## THE INVENTION

Claim 1, reproduced below with emphasis, is illustrative of the subject matter on appeal.

1. A system for *operating and creating a futures spread exchange* comprising:

an instrument *derived from a first event occurring on a first open exchange and a second event occurring on second open exchange*;

a trading platform *exchanging a plurality of said instruments*;

a computer monitor integral with the trading platform that *tracks the first event from the first open exchange trading in a deliverable currency and the second event from the second open exchange trading in a deliverable currency wherein said deliverable currency of said first and said second open exchanges trade using different monetary currencies*, said monitor *activates a conversion mechanism upon a selected event*;

a database integral with the trading platform, said database *storing a plurality of the instruments*;

said database *containing an exchange medium of one or more neutral exchange values*;

said database *storing a trading symbol for the instruments*;

said database containing a memory for *storing a tradeable instrument and the value of the tradeable instrument*;

the computer conversion mechanism integral with the trading platform configured *to select an instrument from one of the instruments stored in the database based upon the selected event from the first and second open exchange*;

said computer conversion mechanism configured *to select a neutral exchange value from said database based on the selected instrument*;

said computer conversion mechanism including a computer server configured *to convert said event from said first or second open exchange from said deliverable currency of said first or second exchange to a selected neutral exchange value;* and

*applying the neutral exchange value to the event from the first open exchange and the event from the second open exchange to establish a value associated with the tradeable instrument;*

a publishing device configured *to publish the symbol and value associated with the tradeable instrument;*

an independent exchange integral with the trading platform configured *to accept[ ] a bid and an offer information based on the value of the tradeable instrument;* and

a processor within said independent exchange that *coordinates a trade of the tradeable instrument based upon said bid and offer information.*

## THE REJECTION

The following rejection is before us for review:

Claims 1–7 and 10–15 are rejected under 35 U.S.C. § 101 for claiming patent-ineligible subject matter.

## ISSUE

Did the Examiner err in rejecting claims 1–7 and 10–15 under 35 U.S.C. §101 for claiming patent-ineligible subject matter?

## ANALYSIS

*The rejection of claims 1–7 and 10–15 under 35 U.S.C. §101 for claiming patent-ineligible subject matter.*

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*Representative claim*

The Appellant argued these claims as a group. App. Br. 8–14. We select claim 1 (reproduced above) as the representative claim for this group, and the remaining claims 2–7 and 10–15 stand or fall with claim 1.

37 C.F.R. § 41.37(c)(1)(iv) (2016).

*Preliminary comment*

The Examiner cites prior USPTO Guidance. *See e.g.*, Final Act. 9 (“the interim guidelines FR 12/16/2014 Vol. 79 No. 241”). However, said guidance has been superseded by the 2019 Revised Patent Subject Matter Eligibility Guidance, 84 Fed. Reg. 50 (Jan. 7, 2019) (hereinafter “2019 Revised 101 Guidance”). 2019 Revised 101 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.”).

Accordingly, our analysis will not address the sufficiency of the Examiner’s rejection against prior guidance. Rather, our analysis will comport with the 2019 Revised 101 Guidance.

*Introduction*

35 U.S.C. § 101 provides that “[w]hoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor.”

In that regard, claim 1 covers an “apparatus” and is, thus, statutory subject matter for which a patent may be obtained.<sup>2</sup>

Although the Examiner agrees that the claim covers statutory subject matter, the Examiner states that “the claim is directed to a process.” Final Act. 9. As we read the claim, it sets forth a “system” comprising elements (e.g., trading platform, database, etc.) not steps.

Nevertheless, the § 101 provision “. . . contains an important implicit exception: Laws of nature, natural phenomena, and abstract ideas are not patentable.” *Alice Corp. Pty. Ltd. v. CLS Bank Int’l*, 573 U.S. 208, 216 (2014) (quoting *Ass’n for Molecular Pathology v. Myriad Genetics, Inc.*, 569 U.S. 576, 589 (2013)).

In that regard, notwithstanding claim 1 covers statutory subject matter, the Examiner has raised a question of patent-eligibility on the ground that claim 1 is directed to an abstract idea. Eligibility is a question of law based on underlying facts. *SAP Am., Inc. v. Investpic, LLC*, 890 F.3d 1016, 1020 (Fed. Cir. 2018).

*Alice* identifies a two-step framework for determining whether claimed subject matter is directed to an abstract idea. *Alice*, 573 U.S. at 217.

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<sup>2</sup> This corresponds to Step 1 of the 2019 Revised 101 Guidance which requires determining whether a “claim is to a statutory category.” 2019 Revised 101 Guidance, 84 Fed. Reg. at 53; *see also id.* at 53–54 (“[C]onsider[] whether the claimed subject matter falls within the four statutory categories of patentable subject matter identified by 35 U.S.C. [§] 101 . . .”).

*Alice step one – the “directed to” inquiry*

According to *Alice* step one, “[w]e must first determine whether the claims at issue are *directed to* a patent-ineligible concept.” *Id.* at 218 (emphasis added).

The Examiner determined that

The claim recites the steps of creating a futures contract whose value is not necessarily tied to any particular actual currency in order to avoid the need to convert the monetary value of the futures contract traded in different monetary currencies. In other words, the claim describes steps for facilitating the creation of a futures spread contract having a neutral exchange value in an automated manner.

Final Act. 9

The Appellant contends that

The Examiner’s § 101 rejection erroneously characterizes the claim as “describe[ing] steps for facilitating the creation of a futures spread contract having a neutral exchange value in an automated manner.” (Office Action, p. 9) It appears that this is the abstract idea allegedly claimed by Claim 1. Claim 1, however, does not merely describe steps for creating a futures spread contract – instead, the claim is directed to a system for operating and creating an exchange, (Claim 1, preamble) and further includes computer structure such as the claimed conversion device. In other words, the claim is directed to a physical exchange, not a futures spread contract, where the exchange further addresses the problem of assigning value to tradable instruments based on events occurring on two separate, independent exchanges. The invention establishes a new physical trading platform, not an abstract idea for a trading instrument. The claimed invention therefore does not fall within any of the abstract categories identified in the Office Action. (e.g. p. 9).

Moreover, Claim 1 does not fall within the definition of “abstract” because it includes concrete and tangible elements,

rather than a mere idea. Claim 1’s concrete and tangible elements include at least the claimed “trading platform;” “computer monitor;” “a database integral with the trading platform, said database storing a plurality of [] instruments;” and a “computer conversion mechanism integral with the trading platform.” The inclusion of these specific, concrete and tangible elements, demonstrates that the invention is directed to more than a mere idea and therefore “Step 2A” of the Alice analysis should be answered in the negative. Claim 1 and its dependent claims are not directed to an abstract idea.

Br. 10–11.

The Appellant also contends that “[c]laim 1 addresses the problem arising from the realm of computer networks, namely how to trade a commodity based upon two different trading platforms.” Br. 10. The Appellant suggest that the claimed subject matter is directed to a specific improvement in the way computers operate. *See* Br. 11 (“the Federal Circuit reversed, because the limitations ‘are directed to a specific improvement in the way computers operate, embodied in the self-referential table’ (*quoting Enfish, LLC v. Microsoft Corp.*, 822 F.3d 1327, 1336–1338 (Fed. Cir. 2016)) . . . . As in this case, . . . .”).

Accordingly, there is a dispute over what claim 1 is directed to. Is it directed to “facilitating the creation of a futures spread contract having a neutral exchange value in an automated manner” (Final Act. 9) or, “a new physical trading platform” (Br. 10) or “a specific improvement in the way computers operate” (*id.* at 11)?

*Claim Construction*<sup>3</sup>

We consider the claim as a whole<sup>4</sup> giving it the broadest reasonable construction<sup>5</sup> as one of ordinary skill in the art would have interpreted it in light of the Specification<sup>6</sup> at the time of filing.

If one considers only the claim terms (a) “an instrument”; (b) “a trading platform”; (c) “a computer monitor”; (d) “an exchange medium”; (e) “a memory”; (f) “a computer conversion mechanism”; (g) “a computer server”; (h) “a publishing device”; (i) “an independent exchange”; and (j) “a processor”, the claim would appear to be directed to the physical aspects of an electronic exchange as the Appellant argues. But the claim recites not just these elements but also their operation including steps that must be performed. This is exemplified by these two claim 1 limitations:

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<sup>3</sup> “[T]he important inquiry for a § 101 analysis is to look to the claim.” *Accenture Glob. Servs., GmbH v. Guidewire Software, Inc.*, 728 F.3d 1336, 1345 (Fed. Cir. 2013). “In *Bancorp Servs., L.L.C. v. Sun Life Assurance Co. of Can.*, 687 F.3d 1266, 1273 (Fed.Cir.2012), the court observed that ‘claim construction is not an inviolable prerequisite to a validity determination under § 101.’ However, the threshold of § 101 must be crossed; an event often dependent on the scope and meaning of the claims.” *Internet Patents Corp. v. Active Network, Inc.*, 790 F.3d 1343, 1347–48 (Fed. Cir. 2015).

<sup>4</sup> “In determining the eligibility of respondents’ claimed process for patent protection under § 101, their claims must be considered as a whole.” *Diamond v. Diehr*, 450 U.S. 175, 188 (1981).

<sup>5</sup> 2019 Revised 101 Guidance, 84 Fed. Reg. at 52 n.14 (If a claim, “*under its broadest reasonable interpretation . . .*” (emphasis added)).

<sup>6</sup> “First, it is always important to look at the actual language of the claims . . . . Second, in considering the roles played by individual limitations, it is important to read the claims ‘in light of the specification.’” *Smart Sys. Innovations, LLC v. Chicago Transit Auth.*, 873 F.3d 1364, 1378 (Fed. Cir. 2017) (J. Linn, dissenting-in-part and concurring-in-part), citing *Enfish, LLC v. Microsoft Corp.*, 822 F.3d 1327, 1335 (Fed. Cir. 2016), among others.

[a] computer conversion mechanism including a computer server configured to convert [an] event from [a] first or second open exchange from [a] deliverable currency of said first or second exchange to a selected neutral exchange value; and

applying the neutral exchange value to the event from the first open exchange and the event from the second open exchange to establish a value associated with the tradeable instrument;

Furthermore, when the claim is read in light of the Specification, it becomes evident that the invention is not directed to the physical aspects of the recited elements themselves, individually or in the combination as claimed, but rather in a scheme “to bring to market a global complementary set of trading instruments” (Spec. 3) that the recited elements are to carry out. The Specification provides no physical details about the elements themselves. They are generally disclosed as part of a so-called “Global Futures Spread Exchange” (GFS–X). The elements that form the GFS–X system or any particular arrangement they may have in the system is not the central focus. Rather the focus is on what the GFS–X system is designed to achieve; that is, “executi[ng] [ ] global spreads in a single currency” (Spec. 6). To wit, referring to Fig. 2 (reproduced below), the Specification explains the GFS–X system this way (emphasis added):

Quotes are publicly distributed on one or more open exchanges 50 which may trade using different currencies. Market makers 70 and 60 use the quotes from the open exchanges to formulate underlying futures pricing and establish the spread price of the two instruments. The quotes from the open exchanges 50 are converted to a single currency 100 by a conversion device 100. This is published not only to customers 70 but also on the GFS–X 30 exchange. *The GFS-X 30 exchange establishes the spread quote 38 and displays the spread quote 38 within the GFS-X 30. The GFS-X 30 exchange also displays a bid offer 32 and 34. The spread quote 38, bid 32, offer 34 and trade 36 are*

conducted in a single currency within the GFS-X 30.  
Customers on the GFS-X 30 exchange may execute a trade utilizing the last trade spread quote 38 or on the bid 32 or offer 34. The executed trade 36 is then sent to a clearinghouse 20 for settlement. The executed trade 36 may proceed through the conversion device 100 prior to being sent to the clearing house 20.

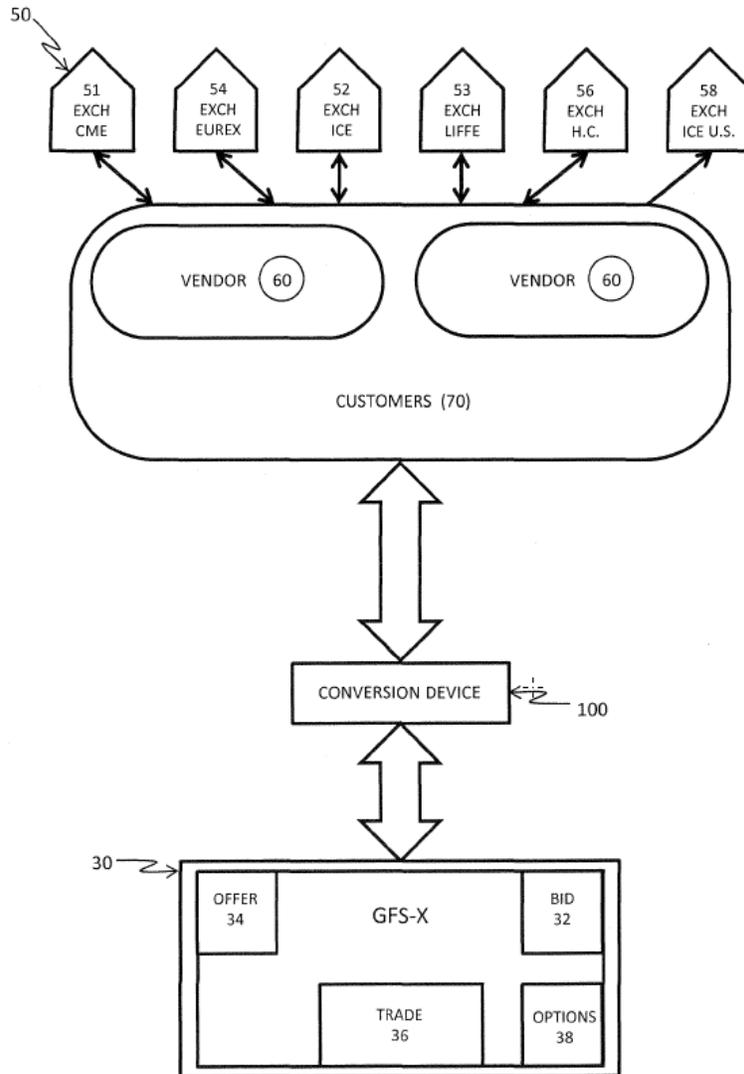


fig. 2

Fig. 2 depicts the Global Futures Spread Exchange (GFS-X) system.

The intrinsic evidence weighs in favor of characterizing the claimed subject matter as being directed to executing certain trades, albeit in a particular way (i.e., in a single currency). This is a reasonable characterization based on reading the claim as a whole in light of the Specification. Characterizing the claimed subject matter as being directed to a “physical trading platform” (Br. 10) as the Appellant argues is less accurate because the claim in fact describes more than that. To limit what the claim is directed to to simply a “physical trading platform” strips the claim of essential details of their operation including the recited steps required to be performed in order to practice the claimed subject matter. It also supports a construction of the claim that does not account for the description of the invention in the Specification. The Specification is not focused on a “physical trading platform” *per se*. That in and of itself is not the advance in the art according the Specification. It is directed to more than that. It is, as the claim reflects, more directed to a particular scheme for executing certain trades (i.e., in a single currency).

*The Abstract Idea*<sup>7</sup>

Above, where we reproduce claim 1, we identify in italics the limitations we believe recite an abstract idea.<sup>8</sup> Based on our claim

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<sup>7</sup> This corresponds to Step 2A of the 2019 Revised 101 Guidance. Step 2A determines “whether a claim is ‘directed to’ a judicial exception,” such as an abstract idea. 2019 Revised 101 Guidance, 84 Fed. Reg. at 53. Step 2A is two prong inquiry.

<sup>8</sup> This corresponds to Prong One (a) of Step 2A of the 2019 Revised 101 Guidance. “To determine whether a claim recites an abstract idea in Prong One, examiners are now to: (a) Identify the specific limitation(s) in the claim under examination (individually or in combination) that the examiner believes recites an abstract idea . . . .” 2019 Revised 101 Guidance, 84 Fed. Reg. at 54.

construction analysis (above), we determine that said claim limitations are directed to a particular scheme for executing trades. Executing trades is a matter that falls within the enumerated “Certain methods of organizing human activity – fundamental economic principles or practices” grouping of abstract ideas set forth in the 2019 Revised 101 Guidance.

*Improvement to other technology or technical field*<sup>9</sup> (*Appellant’s Argument*)

The Examiner’s characterization of what the claim is directed to (“facilitating the creation of a futures spread contract having a neutral exchange value in an automated manner” (Final Act. 9)) is similar to our own (i.e., executing trades), albeit our characterization is described at a higher level of abstraction. *Cf. Apple, Inc. v. Ameranth, Inc.*, 842 F.3d 1229, 1240–41 (Fed. Cir. 2016):

An abstract idea can generally be described at different levels of abstraction. As the Board has done, the claimed abstract idea could be described as generating menus on a computer, or generating a second menu from a first menu and sending the second menu to another location. It could be described in other

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<sup>9</sup> This corresponds to Prong Two (“If the Claim Recites a Judicial Exception, Evaluate Whether the Judicial Exception Is Integrated Into a Practical Application”) of Step 2A of the 2019 Revised 101 Guidance. 2019 Revised 101 Guidance, 84 Fed. Reg. at 54. “A claim that integrates a judicial exception into a practical application will apply, rely on, or use 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.” *Id.* One consideration, implicated here, that is “indicative that an additional element (or combination of elements)<sup>11</sup> may have integrated the exception into a practical application” (*id.* at 55) is if “[a]n additional element reflects an improvement in the functioning of a computer, or an improvement to other technology or technical field” (*id.*).

ways, including, as indicated in the specification, taking orders from restaurant customers on a computer.

Presumably, the Appellant would dispute our characterization just as it has disputed the Examiner’s characterization.

We have reviewed the record and are unpersuaded as to error in the Examiner’s characterization of what claim 1 is directed to.

The Appellant argues that “[c]laim 1 does not fall within the definition of ‘abstract’ because it includes concrete and tangible elements, rather than a mere idea.” Br. 10. Whether or not something as claimed is “concrete” and “tangible” is not the test for determining whether claimed subject matter is judicially-accepted from patent-eligibility. If that were the case, claims reciting computers would necessarily be patent eligible. But that is not the case. *See Alice*, 134 S.Ct. at 2358–59:

The fact that a computer “necessarily exist[s] in the physical, rather than purely conceptual realm” . . . is beside the point. There is no dispute that a computer is a tangible system (in § 101 terms, a “machine”), or that many computer-implemented claims are formally addressed to patent-eligible subject matter. But if that were the end of the § 101 inquiry, an applicant could claim any principle of the physical or social sciences by reciting a computer system configured to implement the relevant concept.

The Appellant argues that

Claim 1 addresses the problem arising from the realm of computer networks, namely how to trade a commodity based upon two different trading platforms. For example, the claimed computer conversion mechanism assigns a value to a tradable instrument based on events occurring on two separate, independent exchanges. (See e.g. specification, p. 11, line 17 – p. 12, line 3).

Br. 10. We reproduce page 11, line 17 – page 12, line 3 of the Specification:

First, the market maker 134 or 34 may go to each individual market such as CME [10 Year Note] and Eurex [10 Year Bund] and execute the trade independently of one another which would involve risks, variation margining on two exchanges and expensive exchange fees.

Alternatively, the trading participant 134 or 34 can “make” a market in the futures exchange option for the 10 year inter-market spread, easily and quickly get market exposure as desired coupled with margin efficiency, all the while collecting exchange fees rather than paying. The futures exchange option for the 10 year market spread is sent to the GFS-X 130 or 30 and converted to U.S. dollars by the conversion device 100 or 200 before it is posted on the GFS-X 130 or 30. The option is published in the exchange GFS-X 30 or 130 for a market taker 132 and 32 to bid or purchase.

We do not see there, or anywhere else in the Specification, any discussion of a technical problem being solved, let alone in “the realm of computer networks” (Br. 10).

It is true that specific asserted improvements in technology, when claimed, can render claimed subject matter not directed to an abstract idea. *Cf. McRO, Inc. v. Bandai Namco Games Am. Inc.*, 837 F.3d 1299, 1316 (Fed. Cir. 2016) (“When looked at as a whole, claim 1 is directed to a patentable, technological improvement over the existing, manual 3–D animation techniques.”). However, there is insufficient evidence in the record before us that the claimed subject matter reflects any specific asserted improvement in technology.

“The ‘abstract idea’ step of the inquiry calls upon us to 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 Texas, LLC v. DIRECTV, LLC*, 838 F.3d 1253, 1257–58 (Fed. Cir. 2016)

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(quoting *Elec. Power Grp., LLC v. Alstom S.A.*, 830 F.3d 1350, 1353 (Fed. Cir. 2016)); *see also Enfish*, 822 F.3d at 1335; *see also Ancora Techs., Inc. v. HTC Am., Inc.*, 908 F.3d 1343, 1347 (Fed. Cir. 2018) (“We examine the patent’s ‘claimed advance’ to determine whether the claims are directed to an abstract idea.”) (quoting *Finjan, Inc. v. Blue Coat Sys., Inc.*, 879 F.3d 1299, 1303 (Fed. Cir. 2018)). “In cases involving software innovations, this inquiry often turns on whether the claims focus on ‘the specific asserted improvement in computer capabilities . . . or, instead, on a process that qualifies as an ‘abstract idea’ for which computers are invoked merely as a tool.” *Id.* (quoting *Finjan*, 879 F.3d at 1303); *see BSG Tech LLC v. BuySeasons, Inc.*, 899 F.3d 1281, 1285–86 (Fed. Cir. 2018). Computers are improved not only through changes in hardware; “[s]oftware can make non-abstract improvements to computer technology . . . .” *Enfish*, 822 F.3d at 1335; *see Finjan*, 879 F.3d at 1304 (“We have several times held claims to pass muster under *Alice* step one when sufficiently focused on such improvements.”).

The Specification’s description of the problem and solution shows the advance over the prior art by the claimed invention is in a particular scheme for executing certain types of trades, not on any technical improvement, such as an improvement in computer functionality. According to the Specification, the problem is, *inter alia*, that “[h]istory has proven that start-up futures exchanges which compete head-to-head with incumbent exchanges and their established core products have a propensity to fail.”  
Spec. 1.

Unlike the driving force behind previous failed exchanges, GFS-X instruments will complement existing exchange traded products and add to the volume and liquidity at

incumbent exchanges. The GFS-X pricing data relies on widespread market-making by liquidity providers based on other exchange pricing feeds. The outcome of this quoting structure is the tightest possible bid-offer spreads as underlying markets constantly shift.

*Id.* at 2.

The primary goal of the GFS-X is to bring to market a global complementary set of trading instruments. GFS-X instruments will enhance the volume of established exchange core products while increasing participation and reducing risk. The intention is to minimize the barriers to exchange access through a new and unique exchange fee structure.

*Id.* at 3–4. “In essence, the GFS-X [ ] offers a unique exchange platform for the execution of global spreads in a single currency which provides ease in clearing and margining at the clearing house and futures commission merchant (FCM) level.” *Id.* at 6. The Specification describes said “platform” (the GFS–X system) in terms of what it is designed to achieve. *See* our discussion above in the *Claim Construction* section.

Accordingly, within the meaning of the 2019 Revised 101 Guidance, we find there is no integration into a practical application. We have considered all of the Appellant’s arguments challenging the Examiner’s determination under step one of the *Alice* framework and find them unpersuasive. For the foregoing reasons, the record supports the Examiner’s determination that claim 1 is directed to an abstract idea.

*Alice step two – Does the Claim Provide an Inventive Concept?*<sup>10</sup>

Step two is “a search for an ‘inventive concept’—*i.e.*, an element or combination of elements that is ‘sufficient to ensure that the patent in practice amounts to significantly more than a patent upon the [ineligible concept] itself.’” *Alice*, 573 U.S. at 217–18 (quoting *Mayo Collaborative Servs. v. Prometheus Labs., Inc.*, 566 U.S. 66, 72–73 (2012)).

In that regard, the Examiner determined, *inter alia*, that the the recitation of the additional element(s) including a trading platform, first and second open exchanges, computer monitor, computer conversion mechanism, database, computer server, publishing device, and processor(s) to implement the steps described above are not enough by itself to transform the exception into a patentable exception, because the elements recited are generic computer components performing generic computer components performing generic computer functions at a high level of generality. Merely using generic computer components to perform the identified basic functions does not constitute meaningful limitations that would amount to significantly more than the abstract idea.

Final Act. 10.

The Appellant argues that “the claim recites elements that resolve a particular computer issue, and are sufficiently limited in scope so as not to pre-empt any fundamental concept.” Br. 13. In the same vein, the Appellant further argues that

Assigning a value based on events from two different exchanges is not a generic computer functionality, but rather a

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<sup>10</sup> This corresponds to Step 2B of the 2019 Revised 101 Guidance page 56 (“[I]f a claim has been determined to be directed to a judicial exception under revised Step 2A, examiners should then evaluate the additional elements individually and in combination under Step 2B to determine whether they provide an inventive concept (*i.e.*, whether the additional elements amount to significantly more than the exception itself).”).

patentable improvement. The combined elements solve the problem of trading a commodity based upon two different trading platforms. This is not a case where the claim pre-empts all trading.

*Id.* at 13–14. The Appellant also cites *BASCOM Global Internet Servs., Inc. v. AT&T Mobility LLC*, 827 F.3d 1341, 1351 (Fed. Cir. 2016) (“[T]he claims may be read to ‘*improve[ ] an existing technological process.*’”) (emphasis added; citation omitted) in arguing that the claimed subject matter “is a technology–based solution rather than an abstract-idea-based solution.” *Id.* at 13.

We have already acknowledged that specific asserted improvements in technology, when claimed, can render claimed subject matter not directed to an abstract idea. *See McRO*, 837 F.3d at 1313 (“[T]he claimed *improvement* here is allowing computers to produce ‘accurate and realistic lip synchronization and facial expressions in animated characters’ that previously could only be produced by human animators.”) (emphasis added). Here, however, there is insufficient evidence in the record before us that the claimed subject matter reflects any specific asserted improvement in technology. Rather than being directed to any specific asserted improvement in technology, the record supports the view that the claimed subject matter is directed to a fundamental economic practice; that is, executing trades, albeit certain types of trades executed in a particular way (i.e., in a single currency).

Above, we noted that specific asserted improvements in technology can turn claimed subject matter away from being directed to an abstract under step one of the *Alice* framework. This is consistent with the case law. *See Ancora*, 908 F.3d at 1347 (“We have several times held claims to pass

muster under *Alice* step one when sufficiently focused on such improvements.”). Such an argument, as the Appellant has done here, can also challenge a determination under step two of the *Alice* framework. See *buySAFE, Inc. v. Google, Inc.*, 765 F.3d 1350, 1354–55 (Fed. Cir. 2014). “[R]ecent Federal Circuit jurisprudence has indicated that eligible subject matter can often be identified either at the first or the second step of the *Alice/Mayo* [framework].” 2019 Revised 101 Guidance, 84 Fed. Reg. at 53; see also *id.* at n.17.

Be that as it may, we are unpersuaded that claim 1 as currently drafted presents an element or combination of elements indicative of a specific asserted improvement in technology, thereby rendering the claimed subject matter sufficient to ensure that the patent in practice amounts to significantly more than a patent upon the abstract idea itself.

We have reviewed the Specification and, as explained above, we can find no suggestion of any technical improvements. The Specification is focused on a trade executing scheme, not on any on the recited elements themselves, individually or in the combination as claimed. Rather than focusing on the (a) “instrument”; (b) “trading platform”; (c) “computer monitor”; (d) “exchange medium”; (e) “memory”; (f) “computer conversion mechanism”; (g) “computer server”; (h) “publishing device”; (i) “independent exchange”; and/or (j) “processor,” the Specification focuses on what they are to achieve, elements (a)–(j) acting merely as conduits for practicing said scheme. Cf. *In re TLI Communications LLC Patent Litigation*, 823 F.3d at 612 (Fed. Cir. 2016) (“Put differently, the telephone unit itself is merely a conduit for the abstract idea of classifying an image and storing the image based on its classification. Indeed, the specification

notes that it ‘is known’ that ‘cellular telephones may be utilized for image transmission,’ [U.S. Patent 6,038,295,] col. 1 ll. 31–34, and existing telephone systems could transmit pictures, audio, and motion pictures and also had ‘graphical annotation capability,’ *id.* at col. 1 ll. 52–59.”)

We are unpersuaded that the record supports interpreting the claim as solving a computer problem as the Appellant has argued. Elements (a) “[I]nstrument[s]”; (b) “trading platform[s]”; (c) “computer monitor[s]”; (d) “exchange medium[s]”; (e) “memor[ies]”; (f) “computer conversion mechanism[s]”; (g) “computer server[s]”; (h) “publishing device[s]”; (i) “independent exchange[s]”; and/or (j) “processor[s]” were notoriously well-known, and the recited functions and steps they are to perform according to the claim ask nothing more of these elements than to use them for their commonly-associated information-processing functions. Much like the “data storage unit” and “computer, coupled to said storage unit” in the claims of *Alice* (U.S. Patent 7,149,720, claim 1), “the claims here [fail to] do more than simply instruct the practitioner to implement the abstract idea [...] on a generic computer.” *Alice*, 573 U.S. at 225.

For the reasons discussed above, we are unpersuaded that the record supports interpreting the steps recited in the claim as yielding any improvement in technology.

Finally, as to the question of preemption, “[w]hat matters is whether a claim threatens to subsume the full scope of a fundamental concept, and when those concerns arise, we must look for meaningful limitations that prevent the claim as a whole from covering the concept’s every practical application.” *CLS Bank Int’l v. Alice Corp. Pty. Ltd.*, 717 F.3d 1269, 1281 (Fed. Cir. 2013) (Lourie, J., concurring). Pre-emption is not a separate test.

To be clear, the proper focus is not preemption per se, for some measure of preemption is intrinsic in the statutory right granted with every patent to exclude competitors, for a limited time, from practicing the claimed invention. *See* 35 U.S.C. § 154. Rather, the animating concern is that claims should not be coextensive with a natural law, natural phenomenon, or abstract idea; a patent-eligible claim must include one or more substantive limitations that, in the words of the Supreme Court, add “significantly more” to the basic principle, with the result that the claim covers significantly less. *See Mayo* 132 S. Ct. at 1294. Thus, broad claims do not necessarily raise § 101 preemption concerns, and seemingly narrower claims are not necessarily exempt.

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

No other persuasive arguments having been presented, we conclude that no error has been committed in the determination under *Alice* step two that claim 1 does not include an element or combination of elements circumscribing the patent-ineligible concept it is directed to so as to transform the concept into an inventive application.

We have considered all of the Appellant’s remaining arguments and find them unpersuasive.

Accordingly, because we are not persuaded as to error in the determination that representative claim 1, and claims 2–7 and 10–15, which

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stand or fall with claim 1, are directed to an abstract idea and do not present an “inventive concept,” we sustain the Examiner’s conclusion that they are directed to patent-ineligible subject matter for being judicially-excepted from 35 U.S.C. § 101. *Cf. LendingTree, LLC v. Zillow, Inc.*, 656 F. App’x 991, 997 (Fed. Cir. 2016) (“We have considered all of LendingTree’s remaining arguments and have found them unpersuasive. Accordingly, because the asserted claims of the patents in suit are directed to an abstract idea and do not present an ‘inventive concept,’ we hold that they are directed to ineligible subject matter under 35 U.S.C. § 101.”); *see, e.g., OIP Techs., Inc. v. Amazon.com, Inc.*, 788 F.3d 1359, 1364 (Fed. Cir. 2015); *FairWarning IP, LLC v. Iatric Sys., Inc.*, 839 F.3d 1089, 1098 (Fed. Cir. 2016).

#### DECISION

The decision of the Examiner to reject claims 1–7 and 10–15 is affirmed.

No time period for taking any subsequent action in connection with this appeal may be extended under 37 C.F.R. § 1.136(a)(1)(iv).

AFFIRMED