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UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

Ex parte HOWARD W. LUTNICK, MICHAEL SWEETING, and JOSEPH NOVIELLO

Appeal 2018–005520
Application 11/213,601
Technology Center 3600

Before HUBERT C. LORIN, ANTON W. FETTING, and BIBHU R. MOHANTY, *Administrative Patent Judges.*

LORIN, *Administrative Patent Judge.*

DECISION ON APPEAL

STATEMENT OF THE CASE

Pursuant to 35 U.S.C. § 134(a), Appellant[1] appeals from the Examiner's decision to reject claims 28–32, 35–40, and 78. We have jurisdiction under 35 U.S.C. § 6(b).

We AFFIRM.

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[1] We use the word Appellant to refer to "applicant" as defined in 37 C.F.R. § 1.42(a). Appellant identifies the real party in interest as BGC Partners, Inc. Appeal Br. 3.

CLAIMED SUBJECT MATTER

The claimed subject matter "relates to the allocation, collection and distribution of commissions received from the trading of financial instruments in electronic trading systems" (Spec., para. 2). Claim 78, reproduced below, is illustrative of the claimed subject matter with emphasis added:

> 78. An electronic trading system comprising:
>
> a computing device;
>
> a network link that couples the computing device to a plurality of workstations, each of the workstations configured to present *a trading* interface *relating to a financial instrument* with the computing device;
>
> a non-transitory medium on which a plurality of instructions are stored that when executed by the computing device, cause the electronic trading system *to determine a first commission for orders for the financial instrument on a price based on a lack of available liquidity at the price*;
>
> *in response to determining the first commission, populate* a first trading interface of a first workstation *with a first trading quad indicating a lack of available liquidity for the financial instrument and a first cost for orders at the price based on the price adjusted by the first commission*;
>
> *in response to input into the first trading quad, receive*, through the network link from the first workstation, *a first order to buy or sell the financial instrument at the price, the first order received at a first time*;
>
> *in response to receiving the first trade command, determine a second commission for orders at the price on the same trading side as the first order based on the first order providing available liquidity at the price, in which the second commission is less advantageous than the first commission*;
>
> *in response to determining the second commission, populate* a second trading interface of a second workstation *with a second trading quad indicating available liquidity that includes the first order for the financial instrument at the price*

and a second cost for orders at the price based on the price adjusted by the second commission;

in response to receiving the first trade command, determine a third commission for counter orders to the first order based on the first order providing available liquidity at the price, in which the third commission is less advantage than the first commission;

in response to determining the third commission, populate a third trading interface of a third workstation *with a third trading quad indicating available liquidity that includes the first order for the financial instrument at the price and a third cost for orders at the price based on the price adjusted by the third commission*;

in response to input into the second trading quad, receive, through the network link from the second workstation, *a second order that is on the same trading side as the first order for the financial instrument, the second order received at a second time, the first time being earlier than the second time*;

in response to input into the third trading quad, receive, through the network link from the third workstation, *a third order that is counter to the first order for the financial instrument, the third order received at a third time, the first time being earlier than the third time*;

in response to receiving the third order, match the first order and third order;

in response to matching the first order and third order, execute a trade for the financial instrument fulfilling at least a portion of the first order and third order; and

in response to executing the trade, applying the first commission to the first order and applying the third commission to the third order.

REJECTION

Claims 28–32, 35–40, and 78 are rejected under 35 U.S.C. § 101 as being directed to judicially-excepted subject matter.

OPINION

The Appellant argued these claims as a group. *See* Appeal Br. 5–10. We select claim 78 as the representative claim for this group, and the remaining claims 28–32 and 35–40 stand or fall with claim 78. 37 C.F.R. § 41.37(c)(1)(iv).

Preliminary comment

Appellant challenges the Examiner's position on the ground that it does not abide by prior guidance. *See* e.g., Appeal Br. 6:

> PTO guidelines that are binding on the Office require that the Office compare the claims and the allegedly abstract idea to case law where similar claims have been deemed abstract to make a lawful determination that the claims are directed to an abstract idea. The examiner has identified zero cases with respect to this first analysis and the idea of "rewarding."

However, previous guidance on patent subject matter eligibility have been superseded by the 2019 Revised Patent Subject Matter Eligibility Guidance, 84 Fed. Reg. 50 (Jan. 7, 2019), hereinafter "2019 Revised 101 Guidance". *Id.* 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, we will not address arguments on the sufficiency of the Examiner's position relative prior guidance but rather our analysis that follows 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 78 covers an "apparatus" and is thus statutory subject matter for which a patent may be obtained.[2] This is not in dispute.

However, the § 101 provision "contains an important implicit exception: Laws of nature, natural phenomena, and abstract ideas are not patentable." *Alice Corp. 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 78 covers statutory subject matter, the Examiner has raised a question of patent–eligibility on the ground that claim 78 is directed to an abstract idea.

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

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 claim 78

> recites the steps of receiving and matching trades, determining a commission or reward based on the trade and indicating available liquidity. This is simply the organization and manipulation of data which can be performed mentally and is an idea of itself and a concept relating to a fundamental economic practice. It is similar to other concepts that have been identified as abstract by

[2] This corresponds to Step 1 of the 2019 Revised 101 Guidance which requires determining whether "the claim is to a statutory category." *Id.* at 53. *See also* sentence bridging pages 53 and 54 ("consider[ ] whether the claimed subject matter falls within the four statutory categories of patentable subject matter identified by 35 U.S.C. 101. . .").

> the courts, such as comparing new and stored information and using rules to identify options in SmartGene [*SmartGene, Inc. v. Advanced Biological Labs., SA*, 555 F.App'x. 950 (Fed. Cir. 2014).] or creating a contractual relationship in buySafe [*buySAFE, Inc. v. Google, Inc*., 765 F.3d 1350 (Fed. Cir. 2014).]. Therefore, the claim is directed to an abstract idea.

Final Rej. 5–6.

Appellant argues that "claims clearly add functionality to a computer that was previously not available and therefore are not directed to an abstract idea" (Appeal Br. 7). *See also id.* at 7–8:

> Applicants claims, like the claim in Trading Technology, Inc v CQG, Inc. [*Trading Technologies International, Inc. v. CQG, Inc*., 675 F.App'x. 1001 (Fed. Cir. 2017).], present a nonconventional improvement to trading technology that increase the efficiency and usability of trading systems. These claims are therefore not directed to an abstract idea. The claims, as the claims in Enfish [*Enfish, LLC v. Microsoft Corp*., 822 F.3d 1327 (Fed. Cir. 2016).], are directed to added functionality that improves computerized trading. These claims clearly add functionality to a computer that was previously not available as is evidenced by the lack of any prior art rejection. The modern era of electronic trading holds computerized trading interfaces and marketplaces as a central technology. The efficiency, speed and accuracy of operation of these systems is an ongoing area of research and development. These computer systems are a cutting edge of technological innovation in security and efficiency.

Accordingly, there is a dispute over whether claim 78 is directed to an abstract idea. Specifically, is claim 78 directed to receiving and matching trades, determining a commission or reward based on the trade and indicating available liquidity (Final Act. 6) or a nonconventional improvement to trading technology (Appeal Br. 7)?

Claim Construction[3]

We consider the claim as a whole[4] giving it the broadest reasonable construction[5] as one of ordinary skill in the art would have interpreted it in light of the specification[6] at the time of filing.

Claim 78 calls for an electronic trading system for comprising (1) a computing device; (2) a network link; (3) a plurality of workstations; (4) an interface; and (5) a non-transitory medium.

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[3] "[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).

[4] "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).

[5] 2019 Revised 101 Guidance, page 53, footnote 14 ("*If a claim, under its broadest reasonable interpretation . . . .*")

[6] "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, 1387 (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.

Specifically, the network link (2) couples the computing device (1) to the plurality of workstations (3); the plurality of workstations (3) are configured to present an interface (4); the interface (4) is a "trading interface relating to a financial instrument with the computing device"; and the non-transitory medium (5) stores "a plurality of instructions . . . that when executed by the computing device [(1)], cause the electronic trading system to" perform the following 12 functions:

1. "determine" A;
2. "in response to determining" A, "populate a first trading interface of a first workstation with" B;
3. "in response to input into" B, "receive, through the network link from the first workstation," C; C "received at a first time";
4. "in response to receiving" C, "determine" D;
5. "in response to determining" D, "populate a second trading interface of a second workstation with" E;
6. "in response to receiving" C, "determine" F;
7. "in response to determining" F, "populate a third trading interface of a third workstation with" G;
8. "in response to input into" E, "receive, through the network link from the second workstation" H, H "received at a second time, the first time being earlier than the second time";
9. "in response to input into" G, "receive, through the network link from the third workstation," I; I "received at a third time, the first time being earlier than the third time";
10. "in response to receiving" I, "match" C and I;
11. "in response to matching" C and I, "execute a trade for the financial instrument fulfilling at least a portion of" C and I; and
12. "in response to executing the trade, applying" A to C and applying F to I;

where,

> A is "a first commission for orders for the financial instrument on a price based on a lack of available liquidity at the price";
>
> B is "a first trading quad indicating a lack of available liquidity for the financial instrument and a first cost for orders at the price based on the price adjusted by" A;
>
> C is "a first order to buy or sell the financial instrument at the price";
>
> D is "a second commission for orders at the price on the same trading side as [C] based on [C] providing available liquidity at the price, in which the second commission is less advantageous than the [A]";
>
> E is "a second trading quad indicating available liquidity that includes the [C] at the price and a second cost for orders at the price based on the price adjusted by [D]";
>
> F is "a third commission for counter orders to [C] based on the [C] providing available liquidity at the price, in which the third commission is less advantage than [A]";
>
> G is "a third trading quad indicating available liquidity that includes the [C] at the price and a third cost for orders at the price based on the price adjusted by [F]";
>
> H is "a second order that is on the same trading side as the [C]"; and,
>
> I is "a third order that is counter to [C]"

Claim 78 is reasonably broadly construed as covering a system comprising a plurality of workstations coupled to a computing device via a network link and configured to present a trading interface and a non-transitory medium storing instructions to practice a scheme for executing a trade for a financial instrument that fulfills certain orders and in response to said execution applying certain commissions to said orders.

The Specification states that the invention "relates to the allocation, collection and distribution of commissions received from the trading of financial instruments in electronic trading systems." Spec., para. 2.

> More particularly, the present invention relates to determining and displaying of commissions charged for trading various tradable items including financial instruments, such as interest-rate-related instruments, equity instruments, derivatives thereof, etc.

Spec., para. 2. *See* also paras. 4–6:

> [E]lectronic matching systems have not significantly impacted the issues of formalizing, determining and allocating the commissions or fees charged to various buyers and sellers who participate in different aspects of the trading processes through their transactions. Moreover, the trading logic used by such systems or platforms (which operates similarly to a voice broker in non-electronic trading) typically does not allow for the full disclosure of such commissions and fees to users until after trades have been processed or confirmed.
>
> It would be therefore desirable to provide systems and methods for the electronic trading of such items that implement sophisticated commission allocations in transaction management of items being traded and that fully and clearly disclose, in real- time, the brokerage fees charged to the participants prior to final settlement.
>
> Summary of the Invention
>
> Therefore, it is an object of the invention to provide systems and methods for the electronic trading of such items that implement sophisticated commission allocations in transaction management of items being traded and that fully and clearly disclose, in real-time, the brokerage fees charged to the participants prior to final settlement.

Given the system as claimed as reasonably broadly construed above and in light of the Specification's description of the invention as being related to determining and displaying of commissions charged for trading

various tradable items, based on the record before us, we reasonably broadly construe claim 78 as being directed to a scheme for allocating commissions to orders in the execution of a trade for a financial instrument in a networked environment.

The Abstract Idea[7]

Above, where we reproduce claim 78, we identify in italics the limitations we believe recite an abstract idea.[8] Based on our claim construction analysis (above), we determine that the identified limitations describe a scheme for allocating commissions to orders in the execution of a trade for a financial instrument in a networked environment. Allocating commissions to orders in the execution of a trade for a financial instrument, is a commercial interaction. It falls within the enumerated "Certain methods of organizing human activity" as grouping of abstract ideas set forth in the 2019 Revised 101 Guidance.[9]

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[7] 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. Step 2A is two prong inquiry.

[8] 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 . . . ." *Id.* at 54.

[9] This corresponds to Prong One ["Evaluate Whether the Claim Recites a Judicial Exception"] (b) 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: . . . (b) determine whether the identified limitation(s) falls within the subject matter groupings of abstract ideas enumerated in Section 1 of the

Improvement In the Functioning of a Computer[10] *(Appellant's Argument)*

The Examiner's characterization of what the claim is directed to is similar to ours, albeit at a lower level of abstraction. "An abstract idea can generally be described at different levels of abstraction." *Apple, Inc. v. Ameranth, Inc*., 842 F.3d 1229, 1240 (Fed. Cir. 2016). *Cf. Id.* at 1241 (The

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[2019 Revised 101 Guidance]." *Id.* at 54. This case implicates subject matter grouping "(b)":

> (b) Certain methods of organizing human activity—fundamental economic principles or practices (including hedging, insurance, mitigating risk); commercial or legal interactions (including agreements in the form of contracts; legal obligations; advertising, marketing or sales activities or behaviors; business relations); managing personal behavior or relationships or interactions between people (including social activities, teaching, and following rules or instructions);

Id. at 52.

[10] 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. "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*. at 54. One consideration, implicated here, that is "indicative that an additional element (or combination of elements) 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.* at 55).

Board's "slight revision of its abstract idea analysis does not impact the patentability analysis.")

We have reviewed the record and are unpersuaded as to error in our or the Examiner's characterization of what claim 78 is directed to.

A principle argument Appellant makes is that the claimed subject matter is not directed to an abstract idea but rather to "a non-conventional improvement to trading technology that increase the efficiency and usability of trading systems." Appeal Br. 7–8.

The record does not adequately support the argument that the claimed system provides a technical improvement. Appellant argues that claim 78 provides for an added "functionality to a computer that was previously not available," which is "a cutting edge of technological innovation in security and efficiency." *Id.* The record does not suggest any such added computer functionality. The Specification does not describe the claimed system as providing additional computer functionality that "increase[s] the efficiency and usability of trading systems." *Id.* 7–8. No technical improvement is mentioned. Rather, the Specification discloses only non-technical improvements, such as a better trading experience for participants. *See* e.g., para. 16 ("Disclosing the commission or reward prior to the execution of a trade paints a better picture of the full costs involved, thereby giving participants an improved opportunity to consider whether or not to participate in the trade.") *See also* para. 6 ("electronic trading of such items that implement sophisticated commission allocations in transaction management of items being traded and that fully and clearly disclose, in real-time, the brokerage fees charged to the participants prior to final

settlement.") These improvements may help traders to make quicker decisions but that alone is insufficient to show that there is an improvement to trading systems or trading technology. Appellant's technical improvement argument is unpersuasive as to error in the Examiner's or our characterization of what the claim is directed to because the record evidence fails to support it. Appellant's attorney's arguments in a brief can not take the place of evidence in the record. *See generally, In re Glass*, 474 F.2d 1015, 1019 (CCPA 1973). *Also see In re Pearson*, 494 F.2d 1399, 1405 (CCPA 1974); *In re De Blauwe*, 736 F.2d 699, 705 (Fed. Cir. 1984); *Meitzner v. Mindick*, 549 F.2d 775 (CCPA 1977), and *In re Schulze*, 346 F.2d 600, 602 (1965).

We note Appellant's citation of *Trading Technologies International, Inc. v. CQG, Inc*., 675 F.App'x. 1001 (Fed. Cir. 2017) as "the most relevant case to the pending claims." Appeal Br. 7. This is a non-precedential decision. Please see instead the precedential *Trading Technologies International, Inc. v. IBG LLC*, 921 F.3d 1378 (Fed. Cir. 2019). It makes the same point we make above; that is, here the evidence weighs in favor of the view that the claim's focus is on nontechnical improvements. *Id.* at 1384 ("The claims are focused on providing information to traders in a way that helps them process information more quickly, '556 patent at 2:26–39, not on improving computers or technology.")

We have carefully reviewed the claim. Per our previous claim construction analysis, claim 78 is reasonably broadly construed as covering a system comprising a plurality of workstations coupled to a computing device via a network link and configured to present a trading interface and a non-

transitory medium storing instructions to practice a scheme for executing a trade for a financial instrument that fulfills certain orders and in response to said execution applying certain commissions to said orders. We see no specific asserted improvement in computer capabilities recited in the claim. Nor does the Specification discuss any. Rather than being directed to any specific asserted improvement in computer capabilities, the claim and specification support the opposite view – that the claimed subject matter is directed to a scheme for allocating commissions to orders in the execution of a trade for a financial instrument in a networked environment, an environment that was well known at the time the application was filed. *See* Spec., paras. 16–23.

The claim provides no additional structural details[11] that would distinguish any of the recited (1) a computing device; (2) a network link; (3) a plurality of workstations; (4) an interface; and (5) a non-transitory medium from those that were well known at the time the application was filed. *See* Spec., paras. 16–25.

With respect to the "determine," "input", "populate", "receive" and "matching" functions, among others, the Specification attributes no special meaning to any of these operations, individually or in the combination as claimed. In our view, consistent with the Specification, these are common processing functions that one of ordinary skill in the art at the time of the

[11] *Cf. Move, Inc. v. Real Estate Alliance Ltd.*, 721 F.App'x. 950, 954 (Fed. Cir. 2018) (Non-precedential). "Claim 1 is aspirational in nature and devoid of any implementation details or technical description that would permit us to conclude that the claim as a whole is directed to something other than the abstract idea identified by the district court."

invention would have known generic computers were capable of performing and would have associated with generic computers. *Cf. OIP Techs., Inc. v. Amazon.com, Inc.*, 788 F.3d 1359, 1363 (Fed. Cir. 2015):

> Beyond the abstract idea of offer-based price optimization, the claims merely recite "well-understood, routine conventional activit[ies]," either by requiring conventional computer activities or routine data-gathering steps. *Alice*, 134 S. Ct. at 2359 (*quoting Mayo*, 132 S.Ct. at 1294) (alterations in original). . . . For example, claim 1 recites "sending a first set of electronic messages over a network to devices," the devices being "programmed to communicate," storing test results in a "machine-readable medium," and "using a computerized system ... to automatically determine" an estimated outcome and setting a price. Just as in *Alice*, "all of these computer functions are 'well-understood, routine, conventional activit[ies]' previously known to the industry." *Alice*, 134 S.Ct. at 2359 (*quoting Mayo*, 132 S.Ct. at 1294) (alterations in original); *see also buySAFE[, Inc. v. Google, Inc.]*, 765 F.3d [1350,] 1355 [(Fed. Cir. 2014)] ("That a computer receives and sends the information over a network—with no further specification—is not even arguably inventive.").

At best, the system distinguishes over other generic computers known at the time the application was filed in the *type* of electronic information being processed – that is, for example, commissions and orders. But that alone is not patentably consequential. This is so because "[c]laim limitations directed to the content of information and lacking a requisite functional relationship are not entitled to patentable weight because such information is not patent eligible subject matter under 35 U.S.C. § 101." *Praxair Distribution, Inc. v. Mallinckrodt Hospital Products IP Ltd.*, 890 F.3d 1024, 1032 (Fed. Cir. 2018).

Accordingly, within the meaning of the 2019 Revised 101 Guidance, we find there is no integration of the abstract idea into a practical application.

We have considered Appellant's other 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 78 is directed to an abstract idea.

Alice step two – Does the Claim Provide an Inventive Concept?[12]

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, 73 (2012)).

In that regard, the Examiner determined that the:

> The claim recites the additional limitations of using an electronic trading system to receive trade information. The electronic trading system simply performs the generic computer functions of receiving. Generic computers performing generic computer functions, alone, do not amount to significantly more than the abstract idea. Viewing the limitations as an ordered combination does not add anything further than looking at the limitations individually. When viewed either individually, or as an ordered combination, the additional limitations do not

[12] This corresponds to Step 2B of the 2019 Revised 101 Guidance (*see* p. 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).

> amount to a claim as a whole that is significantly more than the abstract idea.

Final Act. 6. We agree.

We addressed the matter of whether there were any purported specific asserted improvements in computer capabilities in our analysis above 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 can also challenge a determination under step two of the *Alice* framework. *See buySAFE*, 765 F.3d at 1354–55. "[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 at 53; *see also id. n.* 17.

Be that as it may, we are unpersuaded that claim 78 presents an element or combination of elements indicative of a specific asserted improvement in computer capabilities, thereby rendering the claimed subject matter sufficient to ensure that the patent in practice amounts to significantly more than a patent upon a scheme for allocating commissions to orders in the execution of a trade for a financial instrument in a networked environment itself.

We have reviewed the Specification and, as explained above, we can find no suggestion of any improvements to the system as a result of performing the functions as broadly as they are recited.

We cited the Specification in our earlier discussion. It is intrinsic evidence that the claimed (1) a computing device; (2) a network link; (3) a

plurality of workstations; (4) an interface; and (5) a non-transitory medium, individually and in the arrangement as claimed are conventional. In doing so, we have followed "Changes in Examination Procedure Pertaining to Subject Matter Eligibility, Recent Subject Matter Eligibility Decision (*Berkheimer v. HP Inc*.[, 881 F.3d 1360 (Fed. Cir. 2018)]," USPTO Memorandum, Robert W. Bahr, Deputy Commissioner For Patent Examination Policy, April 19, 2018 (the "Berkheimer Memo")).

The court in *Berkheimer* held that "[t]he patent eligibility inquiry may contain underlying issues of fact." *Berkheimer*, 881 F.3d at 1365 (*quoting Mortgage Grader, Inc. v. First Choice Loan Servs. Inc*., 811 F.3d 1314, 1325 (Fed. Cir. 2016) ("The § 101 inquiry '***may*** contain underlying factual issues."')). But the court also held that "[w]hen there is *no genuine issue of material fact* regarding whether the claim element or claimed combination is well-understood, routine, [and] conventional to a skilled artisan in the relevant field, this issue can be decided on summary judgment as a matter of law." *Id.* at 1368 (emphasis added). This qualification has been subsequently reiterated.

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

Berkheimer v. HP Inc., 890 F.3d 1369, 1371–73 (Fed. Cir. 2018) (Order, On Petition for rehearing en banc, May 31, 2018); *see also Aatrix Software, Inc.*

v. Green Shades Software, Inc., 890 F.3d 1354, 1368 (Fed. Cir. 2018) ("A factual allegation or dispute should not automatically take the determination out of the court's hands; rather, there needs to be justification for why additional evidence must be considered—the default being a legal determination.").

Here, the Specification indisputably shows the recited (1) a computing device; (2) a network link; (3) a plurality of workstations; (4) an interface; and (5) a non-transitory medium, individually and in the ordered combination as claimed, were conventional at the time of filing. *See* e.g., para. 21 ("A typical workstation 110 may include processor 111, display 112, input device 113, and memory 114, which may be interconnected.") Accordingly, no genuine issue of material fact exists as to the well–understood, routine, or conventional nature of the claimed system as claimed.

Appellant argues that "the claims clearly recite improvements to technology of computerized and networked trading and interfaces. Among other things, speed, interface efficiency, and data integrity are all technological improvements addressed by the claims that are rooted in computers and networking." Appeal Br. 9. But, again, we have been unable to find sufficient supporting evidence. Such improvements could indeed transform claimed subject matter that is otherwise directed to an abstract idea into something significantly more. But the difficulty here is that the record insufficiently shows it.

No other persuasive arguments having been presented, we conclude that no error has been committed in the determination under *Alice* step two

that claim 78 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 arguments (including those made in the Reply Brief) and find them unpersuasive.

Accordingly, because we are not persuaded as to error in the determinations that representative claim 78, and claims 28–32 and 35–40 which stand or fall with claim 78, 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.*, 788 F.3d at 1364; *FairWarning IP, LLC v. Iatric Sys., Inc.*, 839 F.3d 1089, 1098 (Fed. Cir. 2016).

CONCLUSION

The decision of the Examiner to reject claims 28–32, 35–40, and 78 is affirmed.

More specifically:

The rejection of claims 28–32, 35–40, and 78 under 35 U.S.C. § 101 as being directed to judicially-excepted subject matter is affirmed.

DECISION SUMMARY

In summary:

Claims Rejected	35 U.S.C. §	Reference(s)/Basis	Affirmed	Reversed
28–32, 35–40, 78	101	Eligibility	28–32, 35–40, 78	

TIME PERIOD FOR RESPONSE

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

AFFIRMED