UNITED STATES PATENT AND TRADEMARK OFFICE

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UNITED STATES PATENT AND TRADEMARK OFFICE

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BEFORE THE PATENT TRIAL AND APPEAL BOARD

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Ex parte BGC PARTNERS, INC.[1]

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Appeal 2018-004387
Application 14/305,176
Technology Center 3600

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Before CAROLYN D. THOMAS, KARA L. SZPONDOWSKI, and
MICHAEL M. BARRY, *Administrative Patent Judges*.

THOMAS, *Administrative Patent Judge*.

DECISION ON APPEAL

Appellants seek our review under 35 U.S.C. § 134(a) of the
Examiner's Final Rejection of claims 1, 3, 5–9, and 15–27, all the pending
claims in the present application. Claims 2, 4, and 10–14 are canceled. *See*
Claims Appendix. We have jurisdiction over the appeal under 35 U.S.C.
§ 6(b).

We AFFIRM.

The present invention relates generally to managing trading. *See*
Abstract.

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[1] The Appellants name BGC Partners, Inc. as the real party in interest
(App. Br. 3).

Claim 1 is illustrative:

1.   A method, comprising:
receiving by a processing unit trading orders via a communications network from terminals, each trading order having an associated price and comprising either a buy order or a sell order;
displaying by the processing unit, in an electronic display of a user terminal, the received trading orders in trading order stacks, including displaying buy orders in a buy order stack and sell orders in a sell order stack, wherein each of the buy order stack and sell order stack has a top and wherein the trading orders of the respective trading order stacks are ordered resulting each of the buy order stack and sell order stack having a top order;
removing by the processing unit one or more trading orders from a respective one of the trading order stacks, resulting in a current top order of the respective trading order stack;
as a result of removing one or more trading orders from the respective trading order stack, comparing by the processing unit the price of the current top order to a value;
determining by the processing unit that the price of the current top order does not differ from the value by more than a threshold value, wherein determining that the price of the current top order does not differ from the value by more than the threshold value results in no restrictive action being taken with respect to the current top order;
removing by the processing unit one or more additional trading orders from the respective trading order stack, resulting in a new top order of the respective trading order stack;
as a result of removing one or more additional trading orders from the respective trading order stack, comparing by the processing unit the price of the new top order to a comparison value;
determining by the processing unit that the price of the new top order differs from the comparison value by more than a comparison threshold value, the new top order thereby determined to be an outlying order; and
as a result of determining that the price of the [] new top order differs from the comparison value by more than the comparison threshold value, taking by the processing unit a restrictive action with respect to the new top order including at least one of:

at least temporarily leaving, within the electronic display of the user terminal, at least one space between the new top order and the top of the respective trading order stack, thereby not promoting within the electronic display of the user terminal the new top order to the top of the respective trading order stack,

at least temporarily not displaying within the electronic display the new top order within the respective trading order stack, and

modifying within the electronic display an appearance of the new top order as compared to other trading orders within the respective trading order stack;

receiving by the processing unit from the user terminal a subsequent order having an original price that would trade with the price of the new top order; and

based at least in part on the new top order being an outlying order:

generating by the processing unit an alert message regarding the subsequent order, the alert message indicating the original price of the subsequent order may be a mistaken price;

communicating by the processing unit the alert message to the user terminal, wherein the alert message is displayed on the electronic display; and

preventing by the processing unit the subsequent order from trading with the new top order at least until a response to the alert message is received from the user terminal.

Appellants appeal the following rejection:[2]

Claims 1, 3, 5–9, and 15–27 are rejected under 35 U.S.C. § 101 because the claimed invention is directed to patent-ineligible subject matter.

We review the appealed rejections for error based upon the issues identified by Appellants, and in light of the arguments and evidence produced thereon. *Ex parte Frye*, 94 USPQ2d 1072, 1075 (BPAI 2010)

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[2] The Examiner withdraws the anticipation rejection of claims 1–17 under 35 U.S.C. § 102 (Final Act. 7).

(precedential).

RELATED DECISION

Appeal No. 2017-004763 (App. No. 14/336,217), mailed
August 1, 2018 (Examiner Reversed). We adopt and incorporate herein by
reference the Board's related decision to the extent it applies to the similar
arguments and evidence made herein.

ANALYSIS

Rejection under § 101

Issue: Did the Examiner err in finding that the claims are directed to
patent-ineligible subject matter?

Alice Step One

Alice Corp. Pty. Ltd. v. CLS Bank International, 134 S. Ct. 2347
(2014) identifies a two-step framework for determining whether claimed
subject matter is judicially-excepted from patent eligibility under § 101.
According to *Alice* step one, "[w]e must first determine whether the claims
at issue are directed to a patent-ineligible concept," such as an abstract idea.
Alice, 134 S. Ct. at 2355. "If the claims are not directed to an abstract idea
[or other patent-ineligible concept], the inquiry ends. If the claims are
'directed to' an abstract idea, then the inquiry proceeds to the second step of
the Alice framework." *McRO, Inc. v. Bandai Namco Games Am. Inc.*, 837
F.3d 1299, 1312 (Fed. Cir. 2016). In analyzing whether a claims is directed
to an abstract idea, we look to other decisions where similar concepts were
previously found abstract by the courts. *See Amdocs (Israel) Ltd. v. Openet
Telecom, Inc.*, 841 F.3d 1288, 1294 (Fed. Cir. 2016).

With respect to independent method claim 1, and similarly, system claim 17, the Examiner determines these claims are directed to "the abstract idea of <u>restricting a trade order</u> . . . [by] organizing and comparing price data . . . [as] the cited steps evidence a mathematical relationship or formula that embodies the abstract idea of restricting a trade order if a trade price differs from a value by more than a threshold value" (Final Act. 8–9), which is similar to "using categories to organize, store, [and] transmit information [as] in *Cyberfone*, or comparing new and stored information and using rules to identify options [as] in *SmartGene*" (*id.* at 9).

Appellants challenge the Examiner's "abstract" determinations by contending that "[t]he Office Action fails to properly identify where this allegedly abstract idea is recited in the claims" (App. Br. 9) or "explain how the alleged abstract idea is embodied in the various recitations" (*id.* at 10). Appellants further contend that "the Office Action fails to provide any evidence, whatsoever, to support the assertion [] abstract idea" (*id.* at 12), "[r]ather, the Examiner provides only conclusory opinions" (*id.*) that is "an over generalization that is untethered to the claim language" (*id.* at 13).

We note that Appellants have not identified any cases that stand for the proposition that Examiners *must* provide evidentiary support in every case before a conclusion can be made that a claim is directed to an abstract idea. There is no such requirement. *See, e.g.,* para. IV "July 2015 Update: Subject Matter Eligibility" to 2014 Interim Guidance on Subject Matter Eligibility (2014 IEG), 79 Fed. Reg. 74618 (Dec. 16, 2014) ("The courts consider the determination of whether a claim is eligible (which involves identifying whether an exception such as an abstract idea is being claimed) to be a *question of law*. Accordingly, courts do not rely on evidence that a

claimed concept is a judicial exception, and in most cases resolve the ultimate legal conclusion on eligibility without making any factual findings" (emphasis added)). Evidence may be helpful in certain situations where, for instance, facts are in dispute. But it is not always necessary. In analyzing whether a claims is directed to an abstract idea, we generally look to other decisions where similar concepts were previously found abstract by the courts. *See Amdocs*, 841 F.3d at 1294.

With that in mind, we point out that the Examiner highlights known abstract concepts from numerous decisions such as *Cyberfone, SmartGene, Alice, Bilski, Content Extraction,* and *CyberSource,* i.e., comparing new and stored information and using rules to identify options; using categories to organize, store, and transmit data; intermediate settlement; and/or risk hedging (*see* Final Act. 9; *see also* Ans. 9–12). As such, we find that the Examiner's cogent analysis relying on judicial examples (*id.*) shows the Examiner provided adequate basis for making the rejection. Furthermore, in the Answer the Examiner identified specific recitations in the claims and link the same to known abstract concepts (*see* Ans. 4).

Specifically, the claimed sequence of steps in claim 1 cover employing a processing unit to perform functions, such as receiving trading orders, displaying the trade orders, removing trade orders, comparing price of a top order, determining price does not differ, removing additional orders, comparing price of a new top order, determining price of a new top order differs, determining an outlying order, generating an alert message, and taking a restrictive action (*see* claim 1).

For instance, information collection and analysis, including when limited to particular content, is within the realm of abstract ideas. *See, e.g.,*

Elec. Power Grp. LLC v. Alstom S.A., 830 F.3d 1350, 1353 (Fed. Cir. 2016) (holding that "collecting information, analyzing it, and displaying certain results of the collection and analysis" are "a familiar class of claims 'directed to' a patent-ineligible concept"); *FairWarning IP, LLC v. Iatric Sys., Inc.*, 839 F.3d 1089, 1093–94 (Fed. Cir. 2016); *Internet Patents Corp. v. Active Network, Inc.*, 790 F.3d 1343, 1349 (Fed. Cir. 2015); *Digitech Image Techs., LLC v. Elecs. for Imaging, Inc.*, 758 F.3d 1344, 1351 (Fed. Cir. 2014); and *CyberSource Corp. v. Retail Decisions, Inc.*, 654 F.3d 1366, 1370 (Fed. Cir. 2011).

Because the claims are directed to information collection and analysis, we agree with the Examiner that the claims are directed to an abstract idea.

Alice Step Two

We now turn to the second step of the *Alice* framework: "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*, 134 S. Ct. at 2355 (citing *Mayo Collaborative Servs.*, 132 S. Ct. 1289, 1294 (2012)).

The Examiner determines that "the <u>function performed by the general-purpose computer at each step is purely conventional</u> . . . each step [is] will-understood, routine, [and] conventional in the field" (Final Act. 9–10). For example, the Examiner highlights exemplary conventional technologies related to the claimed features of "temporarily leaving space in a trading order," "generating an alert," and "preventing a trade order", such conventional technologies are "stop-gap provisions," "informative messaging," and "requiring trade confirmations" (*id.* at 10) and further notes

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that such limitations "are merely directed to instructions to implement the idea on a generic computer" (*id., citing* Appellants' Spec. ¶ 26). We agree with the Examiner.

Appellants contend that "the Office Action has not provided any <u>explanation</u> for why any specific limitation does not add significantly more to the alleged abstract idea" (App. Br. 16) and the analysis "does not even appear to consider the recitations of any dependent claims" (*id.* at 18).

Firstly, we find unavailing Appellants' argument that the Examiner did not provide any explanation for why specific limitations do not add significantly more given the Examiner's explanation noted *supra* regarding similar conventional technologies, which Appellants fail to persuasively rebut.

Secondly, while we agree with Appellants that the Examiner addressed the dependent claims in an abbreviated manner in the Final Action (*see* Final Act. 11), we agree with the Examiner's conclusion that the dependent claims do not add significantly more than the abstract idea itself (*id.*). Notably, apart from listing the claim numbers, Appellants provided no separate discussion regarding the specific features introduced by the dependent claims. We agree with the Examiner that "it is unclear from Appellant[s] argument what particular additional limitations . . . in such dependent claims are alleged to amount to significantly more" (Ans. 8). Stated differently, aside from summarily asserting that the Examiner failed to provide a proper analysis of the dependent claims, Appellants present no persuasive argument or technical reasoning to demonstrate that the dependent claims are patent-eligible. Therefore, Appellants' arguments fail because they do not indicate what features of these limitations cause the

claims to add "significantly more features" and why. A statement which merely points out what a claim recites (or the claim number) will not be considered an arguments for separate patentability of the claim. 37 C.F.R. § 41.37(c)(1)(iv).

Appellants question "if no feature of the claims (alone or in combination) recites 'significantly more' . . . then why are the claims deemed allowable over the art?" (App. Br. 18). In essence, Appellants contend that because the Examiner did not reject the claims over prior art, "the Examiner effectively concedes that the claims must recite significantly more" (*id.*).

However, a finding of novelty or non-obviousness does not require the conclusion that the claimed subject matter is patent-eligible. Although the second step in the *Mayo/Alice* framework is termed a search for an "inventive concept," the analysis is not an evaluation of novelty or nonobviousness, but, rather, is a search for "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 Corp.*, 134 S. Ct. at 2355. "Groundbreaking, innovative, or even brilliant discovery does not by itself satisfy the § 101 inquiry." *Ass'n. for Molecular Pathology v. Myriad Genetics, Inc.*, 569 U.S. 576, 591 (2013). A novel and non-obvious claim directed to a purely abstract idea is, nonetheless, patent-ineligible. *See Mayo*, 132 S. Ct. at 1304. *See also Diamond v. Diehr*, 450 U.S. 175, 188-89 (1981) ("The '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.").

Appellants also contend that "the present claims are directed toward specific and narrow embodiments, and would not preempt all uses or implementations of the alleged abstract idea" (App. Br. 19–20).

Although pre-emption "'might tend to impede innovation more than it would tend to promote it,' thereby thwarting the primary object of the patent laws" *(Alice,* 134 S. Ct. at 2354 (citing *Mayo Collaborative Servs. v. Prometheus Labs., Inc.,* 132 S. Ct. at 1293)), "the absence of complete preemption does not demonstrate patent eligibility" *(Ariosa Diagnostics, Inc. v. Sequenom, Inc.,* 788 F.3d 1371, 1379 (Fed. Cir. 2015)). Moreover, because we find the claimed subject matter covers patent-ineligible subject matter, the pre-emption concern is necessarily addressed. As correctly noted by the Examiner, "preemption is not a stand-alone test for eligibility. . . . questions of preemption are inherent in the two-part framework" (Ans. 8). "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.

Finally, Appellants contend that "[s]imilar to the claims in *DDR Holdings,* the present claims solve a problem rooted in computer technology to improve the functionality of electronic exchanges" (App. Br. 21).

In *DDR Holdings, LLC v. Hotels.com, L.P.,* 773 F.3d 1245, 1259 (Fed. Cir. 2014), the subject claim was held patent-eligible because it encompassed "an inventive concept" for resolving a "particular Internet-centric problem." Specifically, the invention in *DDR Holdings* allowed a host merchant website to maintain the look and feel of the host website when hyperlinking to outside merchants' product pages, i.e., "specify how

interactions with the Internet are manipulated to yield a desired result."
DDR Holdings, 773 F.3d at 1257–58.

In contrast, we find Appellants' method performed by a processing unit (claim 1) does not provide a solution "necessarily rooted in computer technology in order to overcome a problem specifically arising in the realm of computer networks." *DDR*, 773 F.3d at 1257. Because we find all claims on appeal merely use a generic computer or processor as a tool which is used in the way a computer normally functions, we conclude that the claims fail to impart any discernible improvement upon the computer or processor; nor do Appellants' claims solve "a challenge particular to the Internet" as considered by the court in *DDR*, 773 F.3d at 1256–57.

As recognized by the Supreme Court, "the mere recitation of a generic computer cannot transform a patent-ineligible abstract idea into a patent-eligible invention." *Alice*, 134 S. Ct. at 2358–59 (concluding claims "simply instruct[ing] the practitioner to implement the abstract idea of intermediated settlement on a generic computer" not patent eligible). Furthermore, data management has been a function of computers for as long as computers have existed and will not transform an abstract concept into a patentable invention. *See, e.g., Alice*, 134 S. Ct. at 2359.

The Examiner determines, and we agree, "the claims do not address a technical problem. Rather, the claims address the problem of incorrect market trade order pricing . . . a business practice known from the pre-Internet word" (Ans. 13–14, *citing* Appellants' Specification pages 2–3, 5). Appellant is reminded that "relying on a computer to perform routine tasks more quickly or more accurately is insufficient to render a claim patent eligible." *OIP Techs., Inc. v. Amazon.com, Inc.*, 788 F.3d 1359, 1363 (Fed.

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Cir. 2015) (citing *Alice*, 134 S. Ct. at 2359 ("use of a computer to create electronic records, track multiple transactions, and issue simultaneous instructions" is not an inventive concept)).

Thus, we conclude none of Appellants' claims are like the claim held patent-eligible by the court in *DDR*, in which the claimed invention was directed to the "challenge of retaining control over the attention of the customer in the context of the Internet," such that

> [i]nstead of the computer network operating in its normal, expected manner by sending the website visitor to the third-party website that appears to be connected with the clicked advertisement, the claimed system generates and directs the visitor to the above-described hybrid web page that presents product information from the third-party and visual "look and feel" elements from the host website.

DDR, 773 F.3d at 1258–59. Thus, we find unavailing Appellants' arguments that the claims are similar to *DDR Holdings*, given that no convincing "inventive concept" for resolving a "particular Internet-centric problem" is identified by Appellants.

Because Appellants' independent claims 1 and 17[3] are directed to a patent-ineligible abstract concept under the first prong of *Alice* and do not recite something "significantly more" under the second prong of the *Alice* analysis, we sustain the Examiner's rejection of these claims as well as respective dependent claims 3, 5–9, 15, 16, and 18–27 under 35 U.S.C. § 101 as being directed to non-statutory subject matter in light of *Alice* and its' progeny.

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[3] *Alice* also confirmed that if a patent's systems claims are no different in substance from its method claims, they will rise and fall together. *Alice*, 134 S. Ct. at 2360.

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For the foregoing reasons, Appellants' contentions are unpersuasive as to error in the rejection under 35 U.S.C. § 101.

DECISION[4]

We affirm the Examiner's § 101 rejection.

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

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[4] In the event of further prosecution, we leave it to the Examiner to consider if claims 1, 3, 5–9, and 15–27 should be rejected on the grounds of obviousness-type double patenting over claims 1–20 of Patent Application No. 14/336,217.