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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
12/825.691	06/29/2010	Johan L. OLSSON	NL-4010-88	2157

23117 7590 12/22/2017
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EXAMINER

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ART UNIT PAPER NUMBER

3692

NOTIFICATION DATE DELIVERY MODE

12/22/2017

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UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

Ex parte JOHAN L. OLSSON and LARS BEMERSJO

Appeal 2016-006091
Application 12/825,691¹
Technology Center 3600

Before JASON V. MORGAN, BARBARA A. BENOIT, and
PHILLIP A. BENNETT, *Administrative Patent Judges*.

BENNETT, *Administrative Patent Judge*.

DECISION ON APPEAL

STATEMENT OF THE CASE

Appellants appeal under 35 U.S.C. § 134 from the Examiner's final rejection of claims 1, 2, 4–16, and 21–25. We have jurisdiction under 35 U.S.C. § 6(b).

We affirm.

¹ Appellants' Brief ("App. Br.") identifies Nasdaq, Inc., as the real party in interest. App. Br. 3.

CLAIMED SUBJECT MATTER

According to Appellants, the “[p]resent invention relates to a method and a system for trading in automated exchange, and more particularly, it relates to a computer system enabling, and a method for, entering market input data into an automated exchange.” Spec. 1, ll. 4–6. Claim 1, reproduced below, is illustrative of the claimed subject matter:

1. An electronic exchange system, comprising:
 - an external interface, wherein the external interface is a hardware component and is configured to communicate via a network;
 - at least one processor; and
 - a memory, configured to store:
 - a matching module;
 - an internal interface module; and
 - a trading module;wherein:
 - the matching module, internal interface module, and trading module are software modules that include instructions that are executable by the processor;
 - the trading module implements a trading algorithm for generating orders for financial instruments;
 - the trading module is provided by a first proprietor that is different from a second proprietor of the electronic exchange system;
 - the instructions in the trading module, when executed by the at least one processor, cause the at least one processor to perform actions that include:
 - automatically generating orders for financial instruments based on market data and one or more settings;
 - communicating, via the internal interface module and to the matching module, first input data messages that indicate the generated orders;
 - the external interface is configured to receive second input data messages that indicate orders for financial instruments; and

the instructions in the matching module, when executed by the at least one processor, cause the at least one processor to perform matching of the orders indicated in the first input data messages and the orders indicated in the second input data messages.

App. Br. 20–21 (Claims Appendix).

REJECTIONS

Claims 1, 2, 4–16, and 21–25 are rejected under 35 U.S.C. § 101 as being directed to non-statutory subject matter. Final Act. 2–5.²

ANALYSIS

We have reviewed the Examiner’s rejections in light of Appellants’ arguments set forth in the Appeal Brief and the Reply Brief. We are not persuaded by Appellants’ arguments. We adopt as our own (1) the findings and reasons set forth by the Examiner in the action from which this appeal is taken (Final Act. 2–5) and (2) the findings, reasons, and explanations set forth by the Examiner in the Examiner’s Answer in response to Appellants’ Brief (Ans. 2–7), and concur with the conclusions reached by the Examiner. We highlight the following for emphasis.

Legal Standard

In issues involving subject matter eligibility, our inquiry focuses on whether the Examiner has properly applied the two-step test set forth by the Supreme Court in *Alice Corp. v. CLS Bank International*, 134 S. Ct. 2347 (2014). The Supreme Court instructs us to “first determine whether the

² The Examiner has withdrawn the rejections of claims 9–14 and 16 under 35 U.S.C. § 112, second paragraph. Ans. 2.

claims at issue are directed to a patent-ineligible concept.” *Id.* at 2355., Here, the inquiry centers on whether the claims are directed to an abstract idea. If the initial threshold is met, we then move to the second step, in which we “consider the elements of each claim both individually and ‘as an ordered combination’ to determine whether the additional elements ‘transform the nature of the claim’ into a patent-eligible application.” *Id.* (quoting *Mayo Collaborative Servs. v. Prometheus Labs., Inc.*, 566 U.S. 66, 79, 78 (2012)). The Supreme Court describes the second step as 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.’” *Id.* (quoting *Mayo*, 566 U.S. at 72–73).

Alice/Mayo Step 1—Abstract Idea Analysis

Here, the Examiner characterizes the invention as being directed to the abstract idea of “generating orders in an electronic exchange system.” Final Act. 2. This characterization is supported by the evidence of record. Appellants’ Specification characterizes the disclosed technology as providing “a method and a system for trading in automated exchange, and more particularly it relates to a computer system enabling, and a method for, entering market input data into an automated exchange.” Spec. 1, ll. 4–6. This characterization is consistent with the Examiner’s characterization. Appellants make several arguments against the determination that the claims are directed to an abstract idea. We address those argument in turn.

Appellants argue the invention is not an abstract idea because, “while the claims may be, in some way, directed to a financial practice, the claims are not directed to a fundamental economic practice.” App. Br. 13.

Appellants argue electronic exchanges are relatively new to the financial exchange industry, and as such, cannot be fundamental or longstanding. Reply Br. 3. Appellants also argue invention to which the claims are directed is dissimilar from the concept of intermediated settlement found in the *Alice*, and they recite non-abstract concepts such as an “electronic exchange system,” a “processor,” a “memory,” a “trading module,” and a “trading algorithm for generating orders . . . provided by a first proprietor that is different from a second proprietor of the electronic exchange system.” App. Br. 13. Appellants further contend dependent claims 8 and 15 are even less abstract because they recite the use of multiple processors. *Id.*

We disagree. The concepts of risk management and intermediated settlement are not limiting contours as to what constitutes an abstract idea. Rather, they are exemplary in nature. As the Federal Circuit has noted, while “courts have recognized that it is not always easy to determine the boundary between abstraction and patent-eligible subject matter. Recent precedent illustrates this boundary in a variety of factual circumstances.” *Internet Patents Corp. v. Active Network, Inc.*, 790 F.3d 1343, 1347 (Fed. Cir. 2015). In evaluating a software-based invention, the Federal Circuit has conducted the abstract idea inquiry by “ask[ing] whether the focus of the claims is 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.” *Enfish, LLC v. Microsoft Corp.*, 822 F.3d 1327, 1335–36 (Fed. Cir. 2016). In this instance, the claims invoke computers merely as a tool to facilitate trading (an activity the long precedes the use of computers). Moreover, although Appellants argue electronic exchanges “have only been a recent development in modern stock

exchanges,” (Reply Br. 4), Appellants’ Specification acknowledges that electronic trading was conventional and well-known. Spec. 1, l. 24 (“conventional electronic exchange system”). Because electronic exchanges were well-known, we agree with the Examiner that the claimed system and methods operations “can readily be understood as simply adding conventional computer components to well-known business practices.” *Enfish*, 822 F.3d at 1338 (describing characteristics of claims found to be impermissibly abstract). As such, we are not persuaded the Examiner erred in determining Appellants’ claims are directed to an abstract idea, and we proceed, therefore, to the second step of the *Alice/Mayo* inquiry.

Alice/Mayo Step 2—Inventive Concept

As noted previously, in *Alice* step 2, we 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.’” *Id.* (quoting *Mayo*, 566 U.S. at 72–73). Appellants contend the claims amount to “significantly more” because they recite a technical solution to the technical problem of latency in electronic trading networks. App. Br. 14–15; Reply Br. 4–5 (citing Spec. 6, l. 24–7, l. 12). Appellants further argue the similarity of the claims to examples of claims found to be eligible in the Office Guidelines demonstrates the eligibility of the claims. App. Br. 15–16. Appellants also argue dependent claims 8 and 15, which recite limitations including multiple processors on a motherboard, add further support for a finding that the claims amount to “significantly more” than the abstract idea itself. App. Br. 17. We are not persuaded by these arguments.

Appellants argue the claimed invention provides a technical solution to problems of latency. We disagree that the problem solved by the invention is rooted in technology, and we agree with the Examiner that the nature of the problem is more a business problem than a technical one. The system components Appellants identify as providing “significantly more,” the multiple processor components recited in claims 8 and 15 are merely conventional components that provide functionality in a conventional manner. *See* Spec. 9, ll. 1–3 (“computer system 200 may be configured with several processors 202 and/or several memory 201, interconnected according to normal practices in the field of computer science”). In sum, Appellants’ invention is directed to the use of conventional computer data processing activities, and these activities are insufficient to transform the claim into “significantly more” than the abstract idea of generating orders on an electronic exchange system. *See Intellectual Ventures I LLC v. Capital One Fin. Corp.*, 850 F.3d 1332, 1341 (Fed. Cir. 2017). Accordingly, we are not persuaded the claims are eligible under *Alice/Mayo* step 2, and we sustain the rejections made under 35 U.S.C. § 101.

DECISION

We affirm the Examiner’s rejection of claims 1, 2, 4–16, and 21–25.

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