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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* JAMES DAVID RESSELL BARRY, PETER NUNN,  
and RUSSELL ROBERTSON<sup>1</sup>

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Appeal 2016-008421  
Application 14/132,408  
Technology Center 3600

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Before CARL W. WHITEHEAD JR., BRADLEY W. BAUMEISTER, and  
BETH Z. SHAW, *Administrative Patent Judges*.

BAUMEISTER, *Administrative Patent Judge*.

DECISION ON APPEAL

Appellants appeal under 35 U.S.C. § 134(a) from the Examiner's  
Final Rejection of claims 1–20. App. Br. 2. We have jurisdiction under  
35 U.S.C. § 6(b).

We affirm.

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<sup>1</sup> Appellants list Chicago Mercantile Exchange Inc. as the real party in  
interest. Appeal Brief 2 (filed January 11, 2016) (“App. Br.”).

## THE INVENTION

Appellants describe the present invention as follows:

The disclosed embodiments relate to an order entry interface used by [financial] market participants to enter orders for electronic trading. The order entry interface has a visual indication of a price band imposed upon orders. The visual indication may help market participants know the present location of upper and lower bounds of the price band. Such knowledge may help avoid the entry of fictitious orders by market participants attempting to learn the location of the price band. Such knowledge may also help market participants drive the lower or upper bound of the price band toward the price at which the market participant desires to place an order.

Spec. ¶ 10.

Independent claim 1, reproduced below with added emphasis, represents the appealed claims:<sup>2</sup>

1. A computer-implemented method of facilitating an order by a market participant for a trade of a financial instrument via an exchange computer system, the method comprising:

determining a price band for valid orders of the financial instrument, the price band being imposed by the exchange computer system to validate that the orders fall within an acceptable range and such that orders of the financial instrument falling outside of the acceptable range are rejected;

generating, with a processor, an order entry interface for rendering via a display coupled with the processor, the order entry interface being configured for entry of data by the market participant indicative of the order of the financial instrument, the order entry interface comprising a visual indication of the price band;

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<sup>2</sup> Appellants argue claims 1–20 together as a group. *See generally* App. Br. Accordingly, we select independent claim 1 as representative. *See* 37 C.F.R. § 41.37(c)(1)(iv).

capturing, with an input device coupled with the processor, data indicative of the order entered via the order entry interface; and

*transmitting, via a communication network linking the processor and the exchange computer system, the captured data to the exchange computer system if the order falls within the price band.*

### THE REJECTION AND CONTENTIONS

Claims 1–20 stand rejected under 35 U.S.C. § 101 as being directed to non-statutory subject matter. Final Act. 4.<sup>3</sup> The Examiner finds that the claims are directed to “facilitating an order by a market participant for a trade,” which “involves a fundamental economic practice.” Final Act. 2. The Examiner further determines that, as claimed, “the processor, entry interface and the function of transmitting are routine computer functions for processing the abstract idea.” *Id.* at 3. The Examiner determines that “[t]he order interface does not attribute to patent eligible subject matter because the claimed order entry is being used in its expected manner” (*id.*) and “the configuration of a computer linking to another computer system or processor is the normal and routine configuration of a computer networking system” (*id.* at 4). As such, the Examiner determines the claims are not directed to a technological improvement of the abstract idea (*id.*) and concludes the claims are instead directed to a patent ineligible abstract idea (*id.* at 2).

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<sup>3</sup> Rather than repeat the Examiner’s positions and Appellants’ arguments in their entirety, we refer to the above-mentioned Appeal Brief, as well as the following documents for their respective details: the Final Action mailed August 13, 2015 (“Final Act.”); the Examiner’s Answer mailed June 30, 2016 (“Ans.”); and the Reply Brief filed August 30, 2016 (“Reply Br.”).

Appellants argue that the claims are directed to patent eligible subject matter for three general reasons. App. Br. 4–7. Appellants first argue the Examiner improperly characterized the claimed invention. *Id.* at 4–5. According to Appellants, “the claimed invention is not merely a trade entry form[, but] instead facilitates the transaction in connection with a price band.” *Id.* at 4. Appellants contend that “[a]ny characterization of the claimed invention should, at a minimum acknowledge these price band-related aspects of the invention.” *Id.* Appellants argue the rejection

fails to address fundamental aspects of the claimed invention, including, for instance, (i) “the order entry interface comprising a visual indication of the price band” (referenced herein as “the price band visualization” aspect), and (ii) “transmitting . . . captured data to the exchange computer system if the order falls within the price band” (referenced herein as “the contingent data transmission” aspect).

*Id.* at 5 (alteration in original).

Appellants next argue that the claims are not directed to an abstract idea. *Id.* According to Appellants,

The present claims are not directed to a fundamental economic practice, such as the operation of an economic market or the calculation of an interest payment. The present claims . . . instead recite specific, non-conventional activity involving (i) price band visualization, and (ii) contingent data transmission. These aspects of the claimed invention are not fundamental economic practices, but rather detailed procedures taken in the context of a price band imposed by an exchange computer system to validate that orders falls within an acceptable range.

*Id.*

Appellants lastly argue the invention amounts to significantly more than a judicial exception. *Id.* at 6–7. More specifically, Appellants contend that the limitations of (i) determining a price band for valid orders, (ii)

generating an order entry interface, and (iii) “transmitting . . . captured data to the exchange computer system if the order falls within the price band” take the present claims out of the realm of simply reciting an abstract idea and the prescription to “apply it.” *Id.* (alteration in original). In Appellants’ view, these limitations constitute significantly more beyond an abstract idea because “the technical improvements involve reducing the number of rejection messages and other processing associated with handling unacceptable orders.” *Id.* at 7. Appellants assert that the Examiner has failed to evaluate the significantly more requirement in view of the abstract idea identified in the Office Action. *Id.* at 6.

#### PRINCIPLES OF LAW

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) (precedential).

Patent eligibility is a question of law that is reviewable *de novo*. *Dealertrack, Inc. v. Huber*, 674 F.3d 1315, 1333 (Fed. Cir. 2012).

In determining whether the claims set forth patent eligible subject matter under 35 U.S.C. § 101, we first must determine whether the claims at issue are directed to laws of nature, natural phenomena, or abstract ideas. *Ultramercial, Inc. v. Hulu, LLC*, 772 F.3d 709, 714 (Fed. Cir. 2014). In considering whether a claim is directed to an abstract idea, we acknowledge, as did the Supreme Court, that “all inventions at some level embody, use, reflect, rest upon, or apply laws of nature, natural phenomena, or abstract ideas.” *Mayo Collaborative Servs. v. Prometheus Labs., Inc.*, 566 U.S. 66,

71 (2012). We therefore look to whether the claims focus on a specific means or method that improves the relevant technology or are instead directed to a result or effect that itself is the abstract idea and merely invoke generic processes and machinery. *See Enfish, LLC v. Microsoft Corp.*, 822 F.3d 1327, 1336 (Fed. Cir. 2016).

If the claims are directed to an abstract idea, we then must consider whether the claim contains an element or a combination of elements that is sufficient to transform the nature of the claim into a patent-eligible application. *Ulramercial*, 772 F.3d at 714; *Alice Corp. Pty. Ltd. v. CLS Bank Int'l*, 134 S.Ct. 2347, 2355 (2014).

In applying step two of the *Alice* analysis, we must “determine whether the claims do significantly more than simply describe [the] abstract method” and thus transform the abstract idea into patentable subject matter. We look to see whether there are any “additional features” in the claims that constitute an “inventive concept,” thereby rendering the claims eligible for patenting even if they are directed to an abstract idea. Those “additional features” must be more than “well-understood, routine, conventional activity.”

*Intellectual Ventures I LLC v. Erie Indem. Co.*, 850 F.3d 1315, 1328 (Fed. Cir. 2017) (citations omitted).

“[C]laims [that] merely require generic computer implementation[] fail to transform [an] abstract idea into a patent-eligible invention.” *Id.* (alteration in original) (citing *Alice*, 134 S. Ct. at 2357).

## ANALYSIS

### I.

We agree with Appellants (App. Br. 4) that “characterization of the claimed invention should, at a minimum, acknowledge these price band-

related aspects of the invention.” However, consideration of these aspects does not take the claimed invention outside the realm of an abstract idea. For example, the price band visualization limitation of claim 1 merely requires that the price band be displayed on the order entry interface of the market participant’s processor. The acts of gathering and displaying information are merely well understood, routine, and conventional uses of a generic computer.

More importantly, the scope of claim 1’s contenting-data-transmission limitation is broader than Appellants contend. We understand Appellants to argue that claim 1 sets forth the condition that the captured data is transmitted to the exchange computer system *only if* the order falls within the price band. However, claim 1 is not drafted this narrowly. Claim 1 recites a method comprising, in part, “transmitting, via a communication network linking the processor and the exchange computer system, the captured data to the exchange computer system if the order falls within the price band.” The relevant limitation currently is drafted broadly enough to encompass transmitting the captured data to the exchange computer system *at least* if the order falls within the price band. That is, claim 1 does not exclude transmitting the captured data to the exchange computer system when the order falls outside the price band.

It is well settled that “[t]he transitional term ‘comprising’ . . . is inclusive or open-ended and does not exclude additional, unrecited elements or method steps.” *Georgia-Pacific Corp. v. U.S. Gypsum Co.*, 195 F.3d 1322, 1327 (Fed. Cir. 1999) (citing MPEP § 2111.03 (6th ed.1997)). “A drafter uses the term ‘comprising’ to mean ‘I claim at least what follows and

potentially more.” *Vehicular Techs. Corp. v. Titan Wheel Int'l, Inc.*, 212 F.3d 1377, 1383 (Fed. Cir. 2000).

Under this reasonable interpretation, albeit an interpretation that is broader than argued by Appellants, claim 1 merely sets forth a computer-implemented method of facilitating an order wherein the determined price band is displayed on the market participant’s computer and the market participant transmits the order *regardless of whether* the order falls within the price band. As such, we agree with the Examiner that claim 1 merely sets forth a fundamental economic practice of trading commodities and applies it to a generic computing environment. The limitations of claim 1, alone and as an ordered combination, sets forth no technological improvements that reasonably could be interpreted as constituting significantly more than this abstract idea.

## II.

For the sake of compact prosecution, we now analyze whether claim 1 would be limited to patent eligible subject matter if the claim were to be interpreted or amended to limit the scope of the contenting-data-transmission limitation such that the limitation recites “transmitting . . . [*only*] if the order falls within the price band.” We conclude that such a narrower requirement, alone, still would result in the claim merely reciting a method that constitutes a fundamental economic practice applied on a generic computer.

Specifically, claim 1 reads on the following fundamental economic practice, as applied on a generic computer: it was a common economic practice for a market participant to negotiate with a human broker agent of a seller of financial commodities. In these situations, it further was common for the broker to reject the market participant’s order and not pass it along to

the seller if the market participant's bid was outside of a range pre-authorized by the seller. Claim 1, as more narrowly interpreted, then, reads on this transaction being made more efficient by substituting a generic computer for the seller's broker agent.

For the foregoing reasons, Appellants have not persuaded us of error in the Examiner's rejection of the appealed claims for being directed to patent ineligible subject matter. Accordingly, we sustain the rejection under 35 U.S.C. § 101 of independent claim 1, as well as claims 2–20, which are not argued separately.

#### DECISION

The Examiner's decision rejecting claims 1–20 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). *See* 37 C.F.R. § 1.136(a)(1)(iv).

AFFIRMED