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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 MICHAEL SWEETING,
HOWARD W. LUTNICK,
and JOSEPH C. NOVIELLO

_____

Appeal 2016–007382
Application 14/088,680
Technology Center 3600

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Before MURRIEL E. CRAWFORD, ANTON W. FETTING, and
ALYSSA A. FINAMORE, *Administrative Patent Judges.*

FETTING, *Administrative Patent Judge.*

DECISION ON APPEAL

STATEMENT OF THE CASE[1]

Michael Sweeting, Howard W. Lutnick, and Joseph C. Noviello
(Appellants) seek review under 35 U.S.C. § 134 of the Examiner's Final
rejection of claims 41–53 and 55–61, the only claims pending in the

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[1] Our decision will make reference to the Appellants' Appeal Brief ("App.
Br.," filed January 14, 2016) and Reply Brief ("Reply Br.," filed July 25,
2016), and the Examiner's Answer ("Ans.," mailed May 24, 2016), and
Final Action ("Final Act.," mailed April 30, 2015).

application on appeal. We have jurisdiction over the appeal pursuant to 35 U.S.C. § 6(b).

We AFFIRM.

The Appellants invented a way of trading within a spread market for a particular item. Specification para. 1.

An understanding of the invention can be derived from a reading of exemplary claim 57, which is reproduced below (bracketed matter and some paragraphing added).

> 57. A method comprising:
>
> [1] receiving,
>
>> by at least one processor in communication with at least one memory, from a first user of an electronic trading system
>
>> a first order to buy or sell an item
>
>> conditioned on an execution price of the first order being between a best bid price and a best offer price for the item,
>
>> in which the first order to buy or sell the item comprises a buy/sell orientation defining whether the first order is a bid to purchase the item or an offer to sell the item;
>
> [2] communicating,
>
>> by the at least one processor,
>
>> information about the first order
>
>> to a plurality of market participants
>
>> without disclosing the buy/sell orientation of the order to the plurality of market participants,
>
>>> such that the plurality of market participants are not made aware whether the order is an order to buy the item or an order to sell the item,

the plurality of market participants comprising a second user;

[3] receiving,

by the at least one processor,

from the second user of the electronic trading system

a second order to buy or sell the item

conditioned on execution price of the second order being between a best bid price and a best offer price for the item,

in which the second order to buy or sell the item comprises a buy/sell orientation that is contra to the buy/sell orientation of the first order;

[4] responsive to receiving the second order,

matching,

by the at least one processor,

at least a portion of the first order with at least a portion of the second order;

and

[5] responsive to matching at least a portion of the first order with at least a portion of the second order,

causing to be executed,

by the at least one processor,

a trade for at least a portion of the first order against at least a portion of the second order

at a price between a best bid price and a best offer price for the item.

Claims 41–53 and 55–61 stand rejected under 35 U.S.C. § 101 as directed to non-statutory subject matter.

ISSUES

The issues of eligible subject matter turn primarily on whether the claims recite more than abstract conceptual advice of what a computer is to provide without implementation details.

ANALYSIS

Method claim 57 recites receiving order data, communicating information about the order, receiving more order data, matching portions of the orders, and causing execution of a trade based on the match. Thus, claim 57 recites receiving and analyzing data and transmitting data that causes trade execution. None of the limitations recite implementation details for any of these steps, but instead recite functional results to be achieved by any and all possible means. Data reception, analysis and modification, and transmission are all generic, conventional data processing operations to the point they are themselves concepts awaiting implementation details. The sequence of data reception-analysis-transmission is equally generic and conventional. Causing trade execution based on such data transmission is also conventional. The ordering of the steps is therefore ordinary and conventional. The remaining claims merely describe trade parameters, with no implementation details.

The Supreme Court

> set forth a framework for distinguishing patents that claim laws
> of nature, natural phenomena, and abstract ideas from those that
> claim patent-eligible applications of those concepts. First, []
> determine whether the claims at issue are directed to one of
> those patent-ineligible concepts. If so, we then ask, "[w]hat

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else is there in the claims before us? To answer that question, []
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. [The Court] described step two of this
analysis 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."

Alice Corp. Pty. Ltd. v CLS Bank Intl, 134 S. Ct. 2347, 2355 (2014)

(citations omitted) (quoing *Mayo Collaborative Servs. v. Prometheus Labs.,*

Inc., 566 U.S. 66 (2012)).

To perform this test, we must first determine whether the claims at issue
are directed to a patent-ineligible concept. The Examiner determines the
claims directed to buying or selling an item conditioned on an execution
price of the first order being between a best bid price and a best offer price
for the item, which is an abstract idea. Final Act. 9.

Although the Court in *Alice* made a determination as to what the claims
were directed to, we find that this case's claims themselves and the
Specification provide enough information to inform one as to what they are
directed to.

The preamble to claim 57 does not recite what it is directed to, but the
steps in claim 57 result in causing a trade to be executed based on price. The
Specification at paragraph 1 recites that the invention relates to trading
within a spread market for a particular item. Thus, all this evidence shows
that claim 57 is directed to trading based on price. This is consistent with
the Examiner's determination.

It follows from prior Supreme Court cases, and *Bilski* (*Bilski v. Kappos*, 561 U.S. 593 (2010)) in particular, that the claims at issue here are directed to an abstract idea. Like the risk hedging in *Bilski*, the concept of trading based on price is a fundamental economic practice long prevalent in our system of commerce. The use of trading based on price is also a building block of ingenuity in financial markets. Thus, trading based on price, like hedging, is an "abstract idea" beyond the scope of § 101. *See Alice*, 134 S. Ct at 2356.

As in *Alice*, we need not labor to delimit the precise contours of the "abstract ideas" category in this case. It is enough to recognize that there is no meaningful distinction in the level of abstraction between the concept of risk hedging in *Bilski* and the concept of trading based on price at issue here. Both are squarely within the realm of "abstract ideas" as the Court has used that term. *See Alice*, 134 S. Ct at 2357.

Further, claims involving data collection, analysis, and display are directed to an abstract idea. *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"); *see also In re TLI Commc'ns LLC Patent Litig.*, 823 F.3d 607, 611 (Fed. Cir. 2016); *FairWarning IP, LLC v. Iatric Sys., Inc.*, 839 F.3d 1089, 1093–94 (Fed. Cir. 2016). Claim 57, unlike the claims found non-abstract in prior cases, uses generic computer technology to perform data retrieval, analysis, and transmission and does not recite an improvement to a particular computer technology. *See, e.g., McRO, Inc. v. Bandai Namco Games Am. Inc.*, 837

F.3d 1299, 1314–15 (Fed. Cir. 2016) (holding claims not abstract because they "focused on a specific asserted improvement in computer animation"). As such, claim 57 is directed to the abstract idea of receiving, analyzing, and transmitting data.

The remaining claims merely describe trade parameters. We conclude that the claims at issue are directed to a patent-ineligible concept.

The introduction of a computer into the claims does not alter the analysis at *Mayo* step two.

> [T]he mere recitation of a generic computer cannot transform a patent-ineligible abstract idea into a patent-eligible invention. Stating an abstract idea "while adding the words 'apply it'" is not enough for patent eligibility. Nor is limiting the use of an abstract idea "'to a particular technological environment.'" Stating an abstract idea while adding the words "apply it with a computer" simply combines those two steps, with the same deficient result. Thus, if a patent's recitation of a computer amounts to a mere instruction to "implemen[t]" an abstract idea "on ... a computer," that addition cannot impart patent eligibility. This conclusion accords with the preemption concern that undergirds our § 101 jurisprudence. Given the ubiquity of computers, wholly generic computer implementation is not generally the sort of "additional featur[e]" that provides any "practical assurance that the process is more than a drafting effort designed to monopolize the [abstract idea] itself."

Alice, 134 S. Ct. at 2358 (citations omitted).

"[T]he relevant question is whether the claims here do more than simply instruct the practitioner to implement the abstract idea [] on a generic computer." *Alice*, 134 S. Ct. at 2359. They do not.

Taking the claim elements separately, the function performed by the computer at each step of the process is purely conventional. Using a computer to receive, analyze, modify, and transmit data amounts to electronic data query and retrieval—one of the most basic functions of a computer. The limitation of execution is not a step, but a recitation of the result of a step, which is aspirational rather than functional. And trade execution based on data transmission is also among the most common data processing operations.[2] All of these computer functions are well-understood, routine, conventional activities previously known to the industry. *See Elec. Power Grp., supra. Also see In re Katz Interactive Call Processing Patent Litig.*, 639 F.3d 1303, 1316 (Fed.Cir. 2011) ("Absent a possible narrower construction of the terms 'processing,' 'receiving,' and 'storing,' . . . those functions can be achieved by any general purpose computer without special programming."). In short, each step does no more than require a generic computer to perform generic computer functions. As to the data operated upon, "even if a process of collecting and analyzing information is 'limited to particular content' or a particular 'source,' that limitation does not make the collection and analysis other than abstract." *SAP Am. Inc. v. InvestPic LLC*, 2018 WL 2207254 (Fed. Cir. 2018).

Considered as an ordered combination, the computer components of Appellants' method add nothing that is not already present when the steps are considered separately. The sequence of data reception-analysis-transmission is equally generic and conventional or otherwise held to be abstract. *See Ultramercial, Inc. v. Hulu, LLC*, 772 F.3d 709, 715 (Fed. Cir.

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[2] *See, e.g.*, Specification paragraph 2.

2014) (determining the sequence of receiving, selecting, offering for exchange, display, allowing access, and receiving payment recited an abstraction); *Inventor Holdings, LLC v. Bed Bath & Beyond, Inc.*, 876 F.3d 1372, 1378 (Fed. Cir. 2017) (sequence of data retrieval, analysis, modification, generation, display, and transmission); *Two-Way Media Ltd. v. Comcast Cable Commc'ns, LLC*, 874 F.3d 1329, 1339 (Fed. Cir. 2017) (sequence of processing, routing, controlling, and monitoring). The ordering of the steps is therefore ordinary and conventional.

Viewed as a whole, Appellants' method claims simply recite the concept of trading based on price as performed by a generic computer. To be sure, the claims recite doing so by advising one to wait to make a trade at a prices from two orders that are between best bid and best offer. But this is no more than abstract conceptual advice on the parameters for such trading based on price and the generic computer processes necessary to process those parameters, and do not recite any particular implementation.

The method claims do not, for example, purport to improve the functioning of the computer itself. Nor do they effect an improvement in any other technology or technical field. The Specification spells out different generic equipment,[3] and parameters that might be applied using this concept and the particular steps such conventional processing would entail based on the concept of trading based on price under different

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[3] Server 104 may be any suitable server, processor, and computer. Workstations 101 may be personal computers, laptop computers, mainframe computers, dumb terminals, data displays, Internet browsers, Personal Digital Assistants (PDAs), two-way pagers, wireless terminals, and portable telephones. Specification para. 32.

scenarios. They do not describe any particular improvement in the manner a computer functions. Instead, the claims at issue amount to nothing significantly more than an instruction to apply the abstract idea of trading based on price using some unspecified, generic computer. Under our precedents, that is not enough to transform an abstract idea into a patent-eligible invention. *See Alice*, 134 S. Ct at 2360.

> As to the structural claims, they

> > are no different from the method claims in substance. The method claims recite the abstract idea implemented on a generic computer; the system claims recite a handful of generic computer components configured to implement the same idea. This Court has long "warn[ed] ... against" interpreting § 101"in ways that make patent eligibility 'depend simply on the draftsman's art.'"

Alice, 134 S. Ct at 2360.

We are not persuaded by Appellants' argument that "[t]he Office Action fails 'to refer to the body of case law precedent . . . to identify abstract ideas by way of comparison to concepts already found to be abstract.'" App. Br. 7 (emphasis omitted). The Examiner provides such comparison at Answer 5. Beyond that, additional comparison is shown *supra*.

We are not persuaded by Appellants' argument that "[t]he Office Action has not properly identified an alleged abstract idea or sufficiently explained why such alleged abstract idea is abstract, as required by the IEG." App. Br. 7–8 (emphasis omitted). Appellants first answered their own argument by repeating the Examiner's determination as to the abstract idea directed to. *Id.* at 8. The Examiner provides further explanation at Answer 5. Beyond that, additional explanation is shown *supra*.

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As to alleged failure to follow the IEG, any Examiner's failure to follow the Director's guidance is appealable only to the extent that the Examiner has failed to follow the statutes or case law. That is, to the extent the Director's guidance goes beyond the case law and is more restrictive on the Examiner than the case law, failure of the Examiner to follow those added restrictions is a matter for petition to the Director.

We are not persuaded by Appellants' argument that "[t]he Office Action fails to identify the additional elements of the dependent claims and fails to explain why each additional element does not add significantly more to the alleged abstract idea, as required by the IEG." App. Br. 9 (emphasis omitted). The additional elements of the dependent claims are part of the intrinsic evidence and so already of record. Appellants first answer their own argument by repeating the Examiner's determination as to the reasons why the dependent claims do not add significantly more. *Id.* As we determine *supra*, the dependent claims do no more than recite various parameters for the abstract idea in the dependent claims. Parameters for an algorithm are themselves abstractions of parts of the algorithm.

We are not persuaded by Appellants' argument that "[t]he claims recite significantly more than the alleged abstract idea." App. Br. 9–10 (emphasis omitted). This is a conclusory argument to which Appellants do no more than recite parts of one claim. This is insufficient to act as a separate argument under 37 C.F.R. § 41.37. *Cf. In re Lovin*, 652 F.3d 1349, 1357 (Fed Cir 2011) ("[T]he Board reasonably interpreted Rule 41.37 to require more substantive arguments in an [A]ppeal [B]rief than a mere recitation of the claim elements and a naked assertion that the corresponding elements were not found in the prior art.").

We are not persuaded by Appellants' argument that "[t]he Office Action has not provided a separate analysis of each claim, as required by the IEG." App. Br. 10 (emphasis omitted). Appellants conflate examination with explication. The Examiner indicates he examined each claim and chooses to summarize the determinations. Again, remedy for Examiner failure to follow the IEG beyond case law is by petition to the Director.

We are not persuaded by Appellants' argument that "[t]he Office Action has not shown that the claims 'tie up' the alleged abstract idea or pre-empt others from using the alleged abstract idea." App. Br. 10–11. "Where a patent's claims are deemed only to disclose patent ineligible subject matter under the *Mayo* [/*Alice*] framework, as they are in this case, preemption concerns are fully addressed and made moot." *Ariosa Diagnostics, Inc. v. Sequenom, Inc.*, 788 F.3d 1371, 1379 (Fed. Cir. 2015).

We are not persuaded by Appellants' argument that "[a]s in DDR Holdings, the 'claimed solution is necessarily rooted in computer technology in order to overcome a problem specifically arising in the realm of computer networks.'" App. Br. 11. The claims at issue are not rooted in computer technology to solve a problem specifically arising in some aspect of computer technology.

> Unlike *DDR Holdings*, the claims at issue are not rooted in computer technology to solve a problem specifically arising in some aspect of computer technology. Instead, the claims at issue are more like the claims we summarized in *DDR Holdings* as insufficient to reach eligibility—claims reciting a commonplace business method aimed at processing business information despite being applied on a general purpose computer.

Versata Dev. Grp., Inc. v. SAP Am., Inc., 793 F.3d 1306, 1334 (2015).

The remaining claims are argued on the basis of the arguments *supra*.

CONCLUSIONS OF LAW

The rejection of claims 41–53 and 55–61 under 35 U.S.C. § 101 as directed to non-statutory subject matter is proper.

DECISION

The rejection of claims 41–53 and 55–61 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). *See* 37 C.F.R. § 1.136(a)(1)(iv) (2011).

AFFIRMED