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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/615,721	07/08/2003	Howard W. Lutnick	03-1082	9421

63710 7590 12/31/2019

INNOVATION DIVISION
CANTOR FITZGERALD, L.P.
110 EAST 59TH STREET (6TH FLOOR)
NEW YORK, NY 10022

EXAMINER
MADAMBA, CLIFFORD B

ART UNIT	PAPER NUMBER
3692	

NOTIFICATION DATE	DELIVERY MODE
12/31/2019	ELECTRONIC

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BEFORE THE PATENT TRIAL AND APPEAL BOARD

Ex parte HOWARD W. LUTNICK and MICHAEL SWEETING

Appeal 2018-008834
Application 10/615,721
Technology Center 3600

Before ST. JOHN COURTENAY III, ERIC S. FRAHM, and KRISTEN L. DROESCH, *Administrative Patent Judges*.

COURTENAY, *Administrative Patent Judge*.

DECISION ON APPEAL

Appellant[1] appeals under 35 U.S.C. § 134(a) from a Final rejection of claims 119, 124, 125, 144, 146, 147, and 148. Claims 1–118, 120–123, 126–143, 145, and 149 are canceled.[2] We have jurisdiction over the pending claims 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). According to Appellant, the real party in interest is BGC Partners, Inc. *See* Appeal Br. 3.

[2] Appellant indicates claims "126–144 (canceled)." Appeal Br. 11. We treat this as a typographical error that was intended to read claims "126–143 (canceled)" because claim 144 is included in the Claims Appendix, immediately below "126–144 (canceled)." Appeal Br. 11. In the event of further prosecution, we leave it to the Examiner to require appropriate correction by an amendment to the claims.

STATEMENT OF THE CASE

Introduction

Embodiments of Appellant's invention relate to "the trading of futures and/or options contracts for non-traditionally traded items or markets." Spec. ¶ 1.

Rejection

Claims 119, 124, 125, 144, 146, 147, and 148 are rejected under 35 U.S.C. § 101, as being directed to a judicial exception, without significantly more. Final Act. 6.

Issue on Appeal

Did the Examiner err in rejecting claims 119, 124, 125, 144, 146, 147, and 148 under 35 U.S.C. § 101, as being directed to a judicial exception, without significantly more? [3]

ANALYSIS

We reproduce *infra* independent Claim 119 in Table One. We have considered all of Appellant's arguments and any evidence presented. To the extent Appellant has not advanced separate, substantive arguments for particular claims, or other issues, such arguments are waived. *See* 37 C.F.R. § 41.37(c)(1)(iv).

[3] The Examiner withdrew the rejection(s) under 35 U.S.C. §103(a). *See* Final Act. 5.

Principles of Law — 35 U.S.C. § 101

An invention is patent-eligible if it claims a "new and useful process, machine, manufacture, or composition of matter." 35 U.S.C. § 101. However, the Supreme Court has long interpreted 35 U.S.C. § 101 to include implicit exceptions: "'[L]aws of nature, natural phenomena, and abstract ideas' are not patentable." *Mayo Collaborative Servs. v. Prometheus Labs., Inc.*, 566 U.S. 66, 70 (2012) (quoting *Diamond v. Diehr*, 450 U.S. 175, 185 (1981)).

In determining whether a claim falls within an excluded category, we are guided by the Supreme Court's two-step framework, described in *Mayo* and *Alice. Alice Corp. v. CLS Bank Int'l*, 573 U.S. 208, 217–18 (2014) (citing *Mayo*, 566 U.S. at 75–77). In accordance with that framework, we first determine what concept the claim is "directed to." *See Alice*, 573 U.S. at 219 ("On their face, the claims before us are drawn to the concept of intermediated settlement, *i.e.*, the use of a third party to mitigate settlement risk."); *see also Bilski v. Kappos*, 561 U.S. 593, 611 (2010) ("Claims 1 and 4 in petitioners' application explain the basic concept of hedging, or protecting against risk.").

Concepts determined to be abstract ideas, and thus patent ineligible, include certain methods of organizing human activity, such as fundamental economic practices (*Alice*, 573 U.S. at 219–20; *Bilski*, 561 U.S. at 611); mathematical formulas (*Parker v. Flook*, 437 U.S. 584, 594–95 (1978)); and mental processes (*Gottschalk v. Benson*, 409 U.S. 63, 67 (1972)). Concepts determined to be patent eligible include physical and chemical processes, such as "molding of rubber products" (*Diehr*, 450 U.S. at 191 "tanning, dyeing, making water-proof cloth, vulcanizing India rubber, smelting ores"

(*id.* at 182 n.7 (quoting *Corning v. Burden*, 56 U.S. (15 How.) 252, 267–68 (1853))); and manufacturing flour (*Benson*, 409 U.S. at 69 (citing *Cochrane v. Deener*, 94 U.S. 780, 785 (1876))).

In *Diehr*, the claim at issue recited a mathematical formula, but the Supreme Court held that "a claim drawn to subject matter otherwise statutory does not become nonstatutory simply because it uses a mathematical formula." *Diehr*, 450 U.S. at 187; *see also id.* at 191 ("We view respondents' claims as nothing more than a process for molding rubber products and not as an attempt to patent a mathematical formula."). Having said that, the Supreme Court also indicated that a claim "seeking patent protection for that formula in the abstract . . . is not accorded the protection of our patent laws, and this principle cannot be circumvented by attempting to limit the use of the formula to a particular technological environment." *Id.* (citing *Benson* and *Flook*); *see, e.g.*, *id.* at 187 ("It is now commonplace that an *application* of a law of nature or mathematical formula to a known structure or process may well be deserving of patent protection.").

If the claim is "directed to" an abstract idea, we turn to the second step of the *Alice* and *Mayo* framework, where "we must examine the elements of the claim to determine whether it contains an 'inventive concept' sufficient to 'transform' the claimed abstract idea into a patent-eligible application." *Alice*, 573 U.S. at 221 (citation omitted). "A claim that recites an abstract idea must include 'additional features' to ensure 'that the [claim] is more than a drafting effort designed to monopolize the [abstract idea].'" *Id.* (alterations in original) (quoting *Mayo*, 566 U.S. at 77). "[M]erely requir[ing] generic computer implementation[] fail[s] to transform that abstract idea into a patent-eligible invention." *Id.*

Subject Matter Eligibility — 2019 Revised Guidance

The USPTO recently published revised guidance on the application of 35 U.S.C. § 101. *See 2019 Revised Patent Subject Matter Eligibility Guidance*, 84 Fed. Reg. 50 (Jan. 7, 2019) ("2019 Revised Guidance"). *This new guidance is applied in this Opinion.* Under the 2019 Revised Guidance, we first look to whether the claim recites:

> (1) any judicial exceptions, including certain groupings of abstract ideas (i.e., mathematical concepts, mental processes, or certain methods of organizing human activity such as a fundamental economic practice or managing personal behavior or relationships or interactions between people);[4] and
>
> (2) additional elements that integrate the judicial exception into a practical application (*see* Manual of Patent Examining Procedure ("MPEP") §§ 2106.05(a)–(c), (e)–(h)).[5, 6]

See 2019 Revised Guidance, 84 Fed. Reg. at 51–52, 55.

A claim that integrates a judicial exception into a practical application applies, relies on, or uses 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. *See* 2019 Revised Guidance, 84 Fed. Reg. at 54. When the judicial exception is so integrated, then the claim is not directed to a judicial exception and is patent eligible under 35 U.S.C. § 101. *Id.*

Only if a claim: (1) recites a judicial exception and (2) does not

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[4] Referred to as "*Step 2A, Prong One*" in the Revised Guidance (hereinafter "*Step 2A, Prong One*").

[5] Referred to as "*Step 2A, Prong Two*" in the Revised Guidance (hereinafter "*Step 2A, Prong Two*").

[6] All references to the MPEP are to the Ninth Edition, Revision 08.2017 (rev. Jan. 2018).

integrate that exception into a practical application, do we then evaluate whether the claim provides an inventive concept. *See* 2019 Revised Guidance, 84 Fed. Reg. at 56; *Alice*, 573 U.S. at 217–18.

For example, we look to whether the claim:

> (3) adds a specific limitation beyond the judicial exception that is not "well-understood, routine, conventional" in the field (*see* MPEP § 2106.05(d)); **or**
>
> (4) simply appends well-understood, routine, and conventional activities previously known to the industry, specified at a high level of generality, to the judicial exception.[7]

See 2019 Revised Guidance, 84 Fed. Reg. at 56.

Because there is no single definition of an "abstract idea" under *Alice* step 1, the PTO has recently synthesized, for purposes of clarity, predictability, and consistency, key concepts identified by the courts as abstract ideas to explain that the "abstract idea" exception includes the following three groupings:

1. Mathematical concepts—mathematical relationships, mathematical formulas or equations, mathematical calculations;
2. Mental processes— concepts performed in the human mind (including an observation, evaluation, judgment, opinion); and
3. 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

[7] Items (3) and (4) continue to be collectively referred to as "*Step 2B*" of the Supreme Court's two-step framework, described in *Mayo* and *Alice*.

> social activities, teaching, and following rules or instructions).

See 2019 Revised Guidance, 84 Fed. Reg. at 52.

According to the 2019 Revised Guidance, "[c]laims that do not recite [subject] matter that falls within these enumerated groupings of abstract ideas should not be treated as reciting abstract ideas," except in rare circumstances. Even if the claims recite any one of these three groupings of abstract ideas, these claims are still not "directed to" a judicial exception (abstract idea), and thus are patent eligible, if "the claim as a whole integrates the recited judicial exception into a practical application of that exception." *See* 2019 Revised Guidance, 84 Fed. Reg. at 53.

For example, limitations that **are** indicative of *integration into a practical application* include:

1. Improvements to the functioning of a computer, or to any other technology or technical field — *see* MPEP § 2106.05(a);
2. Applying the judicial exception with, or by use of, a particular machine — *see* MPEP § 2106.05(b);
3. Effecting a transformation or reduction of a particular article to a different state or thing — *see* MPEP § 2106.05(c); and
4. Applying or using the judicial exception in some other meaningful way beyond generally linking the use of the judicial exception to a particular technological environment, such that the claim as a whole is more than a drafting effort designed to monopolize the exception — *see* MPEP § 2106.05(e).

In contrast, limitations that are **not** indicative of *integration into a practical application* include:

1. Adding the words "apply it" (or an equivalent) with the judicial exception, or merely include instructions to implement an abstract idea on a computer, or merely uses a

computer as a tool to perform an abstract idea — *see* MPEP § 2106.05(f);
2. Adding insignificant extra-solution activity to the judicial exception — *see* MPEP § 2106.05(g); and
3. Generally linking the use of the judicial exception to a particular technological environment or field of use — *see* MPEP § 2106.05(h).

See 2019 Revised Guidance, 84 Fed. Reg. at 54–55 ("Prong Two").

2019 Revised Guidance, Step 2A, Prong One[8]
The Judicial Exception

Under the 2019 Revised Guidance, we begin our analysis by first considering whether the claims recite any judicial exceptions, including certain groupings of abstract ideas, in particular: (a) mathematical concepts, (b) mental steps, and (c) certain methods of organizing human activities.

The Examiner concludes that claims 119, 124, 125, 144, 146, 147, and 148 recite an abstract idea, because the claims describe:

> steps for facilitating the execution of a futures contract transaction. The scheme and/or concept is similar to other concepts that have been identified by the courts as abstract, such as a fundamental economic practice (e.g., concepts relating to the economy and commerce; performance of financial transactions), as well as an idea of itself (e.g., mental process that can be performed in the human mind, by a human manually; collecting and comparing known information as in *Classen*; analyzing information by steps people go through in their minds, or by mathematical algorithms, without more, as essentially mental processes as in *Electric Power Group*; data recognition and storage as in *Content Extraction*), and <u>mathematical</u>

[8] Throughout this opinion, we give the claim limitations the broadest reasonable interpretation consistent with the Specification. *See In re Morris*, 127 F.3d 1048, 1054 (Fed. Cir. 1997).

> relationships and/or formulas (e.g., mathematical concepts, algorithms, relationships, formulas, calculations as in *Flook*).

Final Act. 6–7.

In Table One below, we identify in *italics* the specific claim limitations that we conclude recite an abstract idea. We identify in **bold** the additional (non-abstract) claim limitations that are generic computer components. We identify any "automatically" performed steps using underlined text.

TABLE ONE

Independent Claim 119	2019 Revised Guidance
[a] A method comprising:	A method falls under the statutory subject matter class of a process. *See* 35 U.S.C. § 101 ("Whoever 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, subject to the conditions and requirements of this title.").
[b] electronically, by **the processor**,[9] capturing intellectual property assets data;	Capturing intellectual property assets data is an insignificant extra-solution activity (i.e., data gathering). 2019 Revised Guidance, 55 n.31; *see also* MPEP § 2106.05(g). The processor is an additional non-abstract limitation.

[9] We note there is no antecedent basis for "the processor" in method claim 1, step "b."

Independent Claim 119	2019 Revised Guidance
[c] electronically, by **the processor**, compiling the intellectual property assets data into an index of non-traditionally traded items;	Compiling the intellectual property assets data into an index of non-traditionally traded items is insignificant extra-solution activity. 2019 Revised Guidance, 55 n.31; *see also* MPEP § 2106.05(g). The processor is an additional non-abstract limitation.
[d] populating, by **a processor**, an **options screen** market information pertaining to the index of non-traditionally traded items, in which the index of non-traditionally traded items includes an index of intellectual property assets, in which the options screen displays:	Populating market information pertaining to the index of non-traditionally traded items on an options screen is insignificant extra-solution activity. 2019 Revised Guidance, 55 n.31; *see also* MPEP § 2106.05(g). The processor and the options screen are additional non-abstract limitations.
[e] a highest sale or purchase price for the futures contract,	Price data.
[f] a lowest sale or purchase price for the futures contract, and	Price data.
[g] a total quantity of futures contracts that have been transacted;	Quantity data.
[h] *receiving*, by the processor in response to input in **the options screen**, a *request from a user to transact a futures contract from a plurality of futures contracts that are displayed* on **the options screen**,	Abstract idea: Receiving a request from a user to transact a futures contract from a plurality of futures contracts that are displayed on the options screen is a fundamental economic practice including the subcategories of hedging, mitigating

Independent Claim 119	2019 Revised Guidance
	risk, and including commercial interactions such as agreements in the form of contracts, sales activities or behaviors and business relations that could also be performed alternatively as a mental step. *See* 2019 Revised Guidance 52. The options screen is an additional non-abstract limitation.
[i] in which the index is tied to a portfolio comprising at least one company, in which the at least one company is automatically[10] *selected based on a pre-determined criteria*;	Abstract Idea: selecting based on a pre-determined criteria could be performed alternatively as a mental process. *See* 2019 Revised Guidance 52.
[j] in which the user is **on a remote device** that is in electronic communication with **the processor** over **a network**;	Electronic communication is insignificant extra-solution activity. 2019 Revised Guidance, 55 n.31; *see also* MPEP § 2106.05(g). The remote device, the processor, and the network are additional non-abstract limitations.
[k] *computing*, by **the processor**, *a value of the futures contract based on the performance and a weight that is assigned to each*	Abstract Idea: Computing a value of the futures contract based on the performance and a weight that is assigned to each company of the portfolio is a mathematical

[10] *See Trading Technologies International, Inc. v. IBG LLC*, 921 F.3d 1378, 1384 (Fed. Circ. 2019)("'mere **automation** of manual processes using generic computers' . . . 'does not constitute a patentable improvement in computer technology.'") (quoting *Credit Acceptance Corp. v. Westlake Servs.*, 859 F.3d 1044, 1055 (Fed. Cir. 2017)) (emphasis added).

Independent Claim 119	2019 Revised Guidance
company of the portfolio, in which the weight that is assigned to each company in the portfolio is automatically *determined based on a pre-determined criteria*, in which computing the value of the futures contract is further based on at least one of:	relationship that could be performed alternatively as a mental process with the aid of pen and paper.[11] *See* 2019 Revised Guidance 52. Abstract Idea: The determining of the weight that is assigned to each company based on a pre-determined criteria is a mathematical relationship that could be performed alternatively as a mental process with the aid of pen and paper.[12] *See* 2019 Revised Guidance 52. The processor is an additional non-abstract limitation.
[l] an age of at least one intellectual property asset of the index,	Age data.
[m] a quantity of successful litigations based on at least one the intellectual property asset of the index,	Quantity data.

[11] If a method can be performed by human thought alone, or by a human using pen and paper, it is merely an abstract idea and is not patent eligible under § 101. *See CyberSource Corp. v. Retail Decisions, Inc.*, 654 F.3d 1366, 1372–73 (Fed. Cir. 2011); "That purely mental processes can be unpatentable, even when performed by a computer, was precisely the holding of the Supreme Court in *Gottschalk v. Benson*." *CyberSource*, 654 F.3d at 1375. *See also Synopsys, Inc. v. Mentor Graphics Corp.*, 839 F.3d 1138, 1146–47 (Fed. Cir. 2016).

[12] *See supra*, n.10. (automation of manual processes using generic computers).

Independent Claim 119	2019 Revised Guidance
[n] an amount of licensing revenue generated by at least one the intellectual property asset of the index, and	Amount of licensing revenue data.
[o] a quantity of citations to at least one the intellectual property asset of the index;	Quantity data.
[p] executing, by **the processor**, a transaction of the futures contract for an amount of money that is equivalent to the computed value; and	Abstract idea: Executing a transaction of the futures contract for an amount of money that is equivalent to the computed value is a fundamental economic practice including the subcategories of hedging, mitigating risk, and including commercial interactions such as agreements in the form of contracts, sales activities or behaviors and business relations that could also be performed alternatively as a mental step. *See* 2019 Revised Guidance 52. The processor is an additional non-abstract limitation.
[q] transmitting, by **the processor** to **a remote device**, an indication that the futures contract is to be exchanged at a future date for the amount of money.	Transmitting an indication that the futures contract is to be exchanged at a future date for the amount of money is insignificant post-solution activity. 2019 Revised Guidance, 55 n.31; *see also* MPEP § 2106.05(g). The processor and the remote device are additional non-abstract limitations.

Abstract Ideas — Mental Processes
and Fundamental Economic Practices

After considering representative claim 119 as a whole, we conclude the recited *italicized* functions shown in Table One implement a fundamental economic practice that falls into the subcategories of hedging and mitigating risk (using futures contracts), and including commercial interactions such as agreements in the form of contracts, sales activities or behaviors and business relations that could also be performed alternatively as a mental process.[13] *See* 2019 Revised Guidance, 84 Fed. Reg. at 52. *See also* "*Intellectual Ventures I LLC v. Symantec Corp*., 838 F.3d 1307, 1318 (Fed. Cir. 2016) ('[W]ith the exception of generic computer-implemented steps, there is nothing in the claims themselves that foreclose them from being performed by a human, mentally or with pen and paper.')." 2019 Revised Guidance, 84 Fed. Reg. at 52 n.14.

"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). Merely combining several abstract ideas does not render the combination any less abstract. *See RecogniCorp, LLC v. Nintendo Co.*, 855 F.3d 1322, 1327 (Fed. Cir. 2017) ("Adding one abstract idea (math) to

[13] "Using a computer to accelerate an ineligible mental process does not make that process patent-eligible." *Bancorp Services, L.L.C. v. Sun Life Assur. Co. of Canada* (U.S.), 687 F.3d 1266, 1279 (Fed. Cir. 2012); *see also OIP Techs., Inc. v. Amazon.com, Inc.*, 788 F.3d 1359, 1363 (Fed. Cir. 2015) ("relying on a computer to perform routine tasks more quickly or more accurately is insufficient to render a claim patent eligible.").

another abstract idea . . . does not render the claim non-abstract."); *FairWarning IP, LLC v. Iatric Sys., Inc.*, 839 F.3d 1089, 1093–94 (Fed. Cir. 2016) (determining the pending claims were directed to a combination of abstract ideas).

For at least these reasons, we conclude representative independent claim 119 recites the specific types of abstract ideas identified above in Table One.

Additional Limitations

As emphasized in **bold** in Table One, *supra*, we note the additional non-abstract limitations recited in representative claim 119: "a processor," "an options screen," "a remote device," and "a network." We further note the supporting exemplary descriptions of generic computer components in the Specification, for example: "Back office clearing center 112 may be *any suitable equipment*, such as a computer, a laptop computer, a mainframe computer, etc., or any combination of the same, for causing trades to be cleared and/or verifying that trades are cleared." Spec. ¶ 22. (emphasis added). See also:

> Referring to FIG. 2, workstation 101 may include processor 201, display 202, input device 203, and memory 204, which may be interconnected. In a 20 preferred embodiment, memory 204 contains a storage device for storing a workstation program for controlling processor 201. Processor 201 may use the workstation program to present on display 202 trade information relating to bids, offers, and executed 25 trades relating to the futures and options contracts for specialized indices to a user of workstation 101.

Spec. ¶ 23.

We emphasize that *McRO, Inc. v. Bandai Namco Games Am. Inc*., (837 F.3d 1299 (Fed. Cir. 2016)), guides: "[t]he abstract idea exception prevents patenting a *result* where 'it matters not by what process or machinery the result is accomplished.'" 837 F.3d at 1312 (*quoting O'Reilly v. Morse*, 56 U.S. 62, 113 (1854)) (emphasis added). *See supra* Table One. Because we conclude all claims 1–6, 8–16, and 18–20 on appeal recite an abstract idea, as identified above, under *Step 2A, Prong One*, we proceed to *Step 2A, Prong Two.*

2019 Revised Guidance, Step 2A, Prong Two

Integration of the Judicial Exception into a Practical Application

Pursuant to the 2019 Revised Guidance, we consider whether there are additional elements set forth in the claims that integrate the judicial exception into a practical application. *See* 2019 Revised Guidance, 84 Fed. Reg. at 54–55.

MPEP § 2106.05(a)
Improvements to the Functioning of a Computer or to Any Other Technology or Technical Field

Appellant argues:

> Moreover, following that guidance of *Alice*, in *Trading Technologies International, Inc. v. CQG Inc*., the Federal Circuit recognized that claims to **improvements** to the efficiency of a system used in trading are not directed to abstract ideas regardless that the system was used for trading. A proper analysis of the claims would have followed these guidelines and found the claims to be patent eligible.

Appeal Br. 8 (emphasis added).

However, Appellant fails to provide any substantive, persuasive argument to analogize Appellant's claims to the subject claims considered in the cited case authorities. *Id.* We also note that *Trading Techns. Int'l, Inc. v. CQG, INC.*, (675 Fed.Appx. 1001 (Fed. Cir. 2017)), is a non-precedential opinion.

Further, Appellant has not provided sufficient details regarding how the recited "processor," "options screen," "remote device," and "network (claim 119) include more than mere instructions to perform the recited functions to qualify as an improvement to an existing technology. As discussed above, we conclude Appellant's generic computer implementation performs functions that can be performed alternatively as mental processes. *See* independent Claim 119. Regarding the "automatically" performed steps "i" and "k" of Claim 119, see *Trading Techs. Int'l v. IBG LLC*, 921 F.3d at 1384 (The "'mere automation of manual processes using generic computers' . . . 'does not constitute a patentable improvement in computer technology'"), quoting *Credit Acceptance Corp.*, 859 F.3d at 1055.

Accordingly, on this record, we conclude independent claims 119 and 148 do not recite an improvement to the functionality of a computer or other technology or technical field. *See* MPEP § 2106.05(a).

MPEP §§ 2106.05(b) and (c)
The Bilski Machine-or-Transformation test ("MoT")

We note the Supreme Court cautions that the *MoT* test is not the sole test, but may provide a useful clue:

> This Court's precedents establish that the machine-or-transformation test is a useful and important clue, an investigative tool, for determining whether some claimed

> inventions are processes under § 101. The machine-or-transformation test **is not the sole test** for deciding whether an invention is a patent-eligible "**process**."

Bilski, 561 U.S. at 604 (emphasis added).

Here, Appellant advances no arguments that any of method claims 119, 124, 125, 144, 146, and 147 are tied to a particular machine, or transform an article to a different state or thing. *See* MPEP § 2106.05(c). (We note the preamble of independent claim 148 recites: "An apparatus comprising:" and therefore is not a method or process claim.).

MPEP § 2106.05(e) — Meaningful Claim Limitations[14]

Appellant argues:

> With respect to identifying an abstract idea, the Office Action identifies "facilitating the execution of a futures contract transaction" as an abstract idea. However, the claims encompass[] so many limitations and are not simply "facilitating the execution of a futures contract transaction." Instead, the Office Action reduces the claims to a gist that ignores most of the limitations including significant and meaningful limitations on which patentability rests. This is directly in contradiction to instructions to avoid reduction of the claims.

Appeal Br. 7 (emphasis added).

However, Appellant does not advance further substantive, persuasive arguments as to any specific "meaningful" claim limitations, such as those

[14] *See 2019 Revised Guidance*, 84 Fed. Reg. 55, citing MPEP § 2106.05(e): "[A]pply[ing] or us[ing] the judicial exception in some other *meaningful* way beyond generally linking the use of the judicial exception to a particular technological environment, such that the claim as a whole is more than a drafting effort designed to monopolize the exception." (emphasis added).

of the types addressed under MPEP § 2106.05(e), *that impose meaningful limits on the judicial exception*.

As discussed above, we conclude the recited *italicized* functions shown in Table One could also be performed alternatively as a mental process. *See* 2019 Revised Guidance, 84 Fed. Reg. at 52. As also discussed above, we see nothing in Appellant's claims that specifically improves the efficiency of the processor (Independent claims 119 and 148), or another technology or technical field, as addressed above under MPEP § 2106.05(a).

Accordingly, on this record, we conclude representative independent Claim 119 has no other argued meaningful limitations, as considered under section 2106.05(e) of the MPEP, pursuant to the 2019 Revised Guidance.

MPEP § 2106.05(f)
Merely including instructions to implement
an abstract idea on a computer, or
Merely using a computer as a tool
to perform an abstract idea

We conclude Appellant's claimed invention merely implements the abstract idea using *instructions* executed on generic computer components, as depicted in **bold** type in Table One, and as supported in our reproduction of the Specification, paragraphs 22–23, *supra*. Thus, we conclude Appellant's claims merely use a computer/processor as a tool to perform an abstract idea.

MPEP § 2106.05(g)
Adding insignificant extra-solution activity
to the judicial exception

As mapped in the right column of Table One, *supra*, we conclude that representative independent Claim 119 recites extra or post-solution activities that courts have determined to be insufficient to transform judicially excepted subject matter into a patent-eligible application. *See* MPEP § 2106.05(g); 84 Fed. Reg. at 55 n.31.

MPEP § 2106.05(h)
Generally linking the use of the judicial exception to a particular technological environment or field of use

The Supreme Court guides: "the prohibition against patenting abstract ideas 'cannot be circumvented by attempting to limit the use of the formula to a particular technological environment' or [by] adding 'insignificant postsolution activity.'" *Bilski*, 561 U.S. at 611–12, (*quoting Diehr*, 450 U.S. at 191–92).

Appellant advances no *lack of preemption* argument in the Appeal Brief. Nor do claims 119, 124, 125, 144, 146, 147, and 148 on appeal present any other issues as set forth in the 2019 Revised Guidance regarding a determination of whether the additional generic elements integrate the judicial exception into a practical application. *See* 2019 Revised Guidance, 84 Fed. Reg. at 55.

Thus, under *Step 2A, Prong Two* (MPEP §§ 2106.05(a)–(c) and (e)–(h)), we conclude claims 119, 124, 125, 144, 146, 147, and 148 **do not**

integrate the judicial exception into a practical application. Therefore, we proceed to *Step 2B*, *The Inventive Concept*.

The Inventive Concept – Step 2B

Under the 2019 Revised Guidance, only if a claim: (1) recites a judicial exception, and (2) does not integrate that exception into a practical application, do we then look to whether the claim adds a specific limitation beyond the judicial exception that is not "well-understood, routine, conventional" in the field (*see* MPEP § 2106.05(d)); **or**, simply appends well-understood, routine, conventional activities previously known to the industry, specified at a high level of generality, to the judicial exception.

Berkheimer v. HP Inc., 881 F.3d 1360 (Fed. Cir. 2018)

Berkheimer was decided by the Federal Circuit on February 8, 2018. On April 19, 2018, the PTO issued the Memorandum titled: "Changes in Examination Procedure Pertaining to Subject Matter Eligibility, Recent Subject Matter Eligibility Decision (*Berkheimer v. HP, Inc.*)" (hereinafter "*Berkheimer* Memorandum").[15]

Under *Step 2B*, the Examiner finds: "The claims require no more than a generic computer to perform generic computer functions that are *well-understood, routine and conventional* activities previously known to the industry." Final Act. 5 (emphasis added).

[15] Available at https://www.uspto.gov/sites/default/files/documents/memo-berkheimer-20180419.PDF.

However, Appellant advances no *Berkheimer* arguments in the Appeal Brief (filed March 27, 2018), or in the Reply Brief (filed Sept. 11, 2018), both of which were filed **after** the February 8, 2018 date of the intervening *Berkheimer* decision. Arguments not made are waived. *See* 37 C.F.R. § 41.37(c)(1)(iv).

BASCOM

The Federal Circuit held in *BASCOM* that the claimed Internet content filtering, which featured an implementation "versatile enough that it could be adapted to many different users' preferences while also installed remotely in a single location," expressed an inventive concept in "the non-conventional and non-generic arrangement of known, conventional pieces." *BASCOM Glob. Internet Servs., Inc. v. AT&T Mobility LLC*, 827 F.3d 1341, 1350 (Fed. Cir. 2016).

Under *Step 2B*, Appellant cites to *BASCOM* as a supporting case authority, but provides no substantive arguments analogizing any of the claims 119, 124, 125, 144, 146, 147, and 148 before us on appeal to the subject claim considered by the court in *BASCOM*. *See* Appeal Br. 8–9. Thus, Appellant has not persuasively shown an unconventional, non-generic *arrangement* regarding the non-abstract limitations of generic computer components in any of the claims on appeal. *See* 2019 Revised Guidance, 84 Fed. Reg. at 52.

Therefore, it is our view that Appellant's claims do not involve any improvements to another technology, technical field, or improvements to the functioning of the computer or network, as was seen by the court in *BASCOM*. Instead, we conclude Appellant's claims 119, 124, 125, 144,

146, 147, and 148 merely invoke generic computer components as a tool in which the instructions executing on the computer apply the judicial exception.

Further, regarding the use of the recited generic computer components identified above in Table One, the Supreme Court has held "the mere recitation of a generic computer cannot transform a patent-ineligible abstract idea into a patent-eligible invention." *Alice*, 573 U.S. at 223. Our reviewing court provides additional guidance: *See FairWarning*, 839 F.3d at 1096 ("[T]he use of generic computer elements like a microprocessor or user interface do not alone transform an otherwise abstract idea into patent-eligible subject matter."); *OIP Techs*, 788 F.3d at 1363 (claims reciting, *inter alia*, sending messages over a network, gathering statistics, using a computerized system to automatically determine an estimated outcome, and presenting offers to potential customers found to merely recite "'well-understood, routine conventional activit[ies],' either by requiring conventional computer activities or routine data-gathering steps" (alteration in original)).

This reasoning is applicable here. Therefore, on the record before us, Appellant has not shown that the claims on appeal add a specific limitation beyond the judicial exception that is not well-understood, routine, and conventional, when the claim limitations are considered both individually and as an ordered combination. *See* MPEP § 2106.05(d).

In light of the foregoing, we conclude, under the 2019 Revised Guidance, that each of Appellant's claims 119, 124, 125, 144, 146, 147, and 148 considered as a whole, is *directed to a patent-ineligible abstract idea*

that is not integrated into a practical application, and does not include an inventive concept.

Accordingly, for the reasons discussed above, we sustain the Examiner's rejection under 35 U.S.C. § 101 of claims 119, 124, 125, 144, 146, 147, and 148.

CONCLUSION

Under our 2019 Revised Guidance, as governed by relevant case law, we conclude all claims 119, 124, 125, 144, 146, 147, and 148, rejected under 35 U.S.C. § 101, are directed to patent-ineligible subject matter.

DECISION SUMMARY

Claims Rejected	**35 U.S.C. §**	**Reference(s)Basis**	**Affirmed**	**Reversed**
119, 124, 125, 144, 146, 147, 148	101	Eligibility	119, 124, 125, 144, 146, 147, 148	
Overall Outcome			119, 124, 125, 144, 146, 147, 148	

FINALITY AND 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)(1)(iv). *See* 37 C.F.R. § 41.50(f).

AFFIRMED