



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
15/413,693	01/24/2017	Tina M. Kurtz	8842-137029-US_903US02	8636
122573	7590	06/26/2020	EXAMINER	
Fitch, Even, Tabin & Flannery, LLP/Walmart Apollo 120 South LaSalle Street Suite 2100 Chicago, IL 60603-3406			YANG, ELISA H	
			ART UNIT	PAPER NUMBER
			3625	
			MAIL DATE	DELIVERY MODE
			06/26/2020	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

EX PARTETINA M. KURTZ, KYLE F. GRAHAM,
DAVID M. NELMS and STEPHANIE GARMAN

Appeal 2020-001895
Application 15/413,693
Technology Center 3600

Before ST. JOHN COURTENAY III, LARRY J. HUME, and
PHILLIP A. BENNETT, *Administrative Patent Judges*.

HUME, *Administrative Patent Judge*.

DECISION ON APPEAL

Pursuant to 35 U.S.C. § 134(a), Appellant¹ appeals from the Examiner's decision rejecting claims 1–20, which are all claims pending in the application. We have jurisdiction under 35 U.S.C. § 6(b).

We AFFIRM.

¹ We use the word “Appellant” to refer to “applicant” as defined in 37 C.F.R. § 1.42(a). Appellant identifies the real parties in interest as Walmart, Inc. and Walmart Apollo, LLC. Appeal Br. 3.

STATEMENT OF THE CASE²

These teachings relate generally to retail shopping facilities and more particularly to accommodating customers who visit the facility to pick up a previously ordered item. *See* Spec. ¶ 2.

Exemplary Claim

Claim 1, reproduced below, is representative of the subject matter on appeal (*italics* added to contested prior-art limitations):

1. An apparatus comprising:
 - a retail shopping facility;
 - a network interface;
 - a central computer system for the retail shopping facility and that is operably coupled to the network interface and configured to:*
 - automatically determine that a customer having a retail item available for pickup at the retail shopping facility is currently proximal to the retail shopping facility and automatically responding to that determination by sending the customer a message wherein the message includes an opportunity for the customer to indicate that they will now pick up the retail item at the retail shopping facility.*

Prior Art

The Examiner relies upon the following prior art as evidence in rejecting the claims on appeal:

Agasti et al. (“Agasti”) US 2014/0379529 A1 Dec. 25, 2014

² Our decision relies upon Appellant’s Appeal Brief (“Appeal Br.,” filed Sep. 16, 2019); Reply Brief (“Reply Br.,” filed Jan. 13, 2020); Examiner’s Answer (“Ans.,” mailed Nov. 14, 2019); Final Office Action (“Final Act.,” mailed April 11, 2019); and the original Specification (“Spec.,” filed Jan. 24, 2017).

*Rejections on Appeal*³

R1. Claims 1–20 stand rejected under 35 U.S.C. § 101 because the claimed invention is directed to a judicial exception (i.e., a law of nature, a natural phenomenon, or abstract idea) without significantly more. Final Act. 3.

R2. Claims 1–20 stand rejected under 35 U.S.C. § 102(a)(1) as anticipated by Agasti. Final Act. 9.

CLAIM GROUPING

Based on Appellant’s arguments (Appeal Br. 3–14) and our discretion under 37 C.F.R. § 41.37(c)(1)(iv), we decide the appeal of patent-ineligible subject matter Rejection R1 of claims 1–20 on the basis of representative claim 1; and we decide the appeal of anticipation Rejection R2 of claims 1–20 on the basis of representative claim 1. Dependent claims, not argued separately, stand or fall with independent claims 1 and 11 from which they depend.⁴

³ The Examiner withdrew the rejection of claims 6 and 16 under 35 U.S.C. § 112(b). Ans. 3.

⁴ “Notwithstanding any other provision of this paragraph, the failure of appellant to separately argue claims which appellant has grouped together shall constitute a waiver of any argument that the Board must consider the patentability of any grouped claim separately.” 37 C.F.R. § 41.37(c)(1)(iv). In addition, when Appellant does not separately argue the patentability of dependent claims, the claims stand or fall with the claims from which they depend. *In re King*, 801 F.2d 1324, 1325 (Fed. Cir. 1986).

ISSUES AND ANALYSIS

In reaching this decision, we consider all evidence presented and all arguments actually made by Appellant. To the extent Appellant has not advanced separate, substantive arguments for particular claims, or other issues, such arguments are waived. 37 C.F.R. § 41.37(c)(1)(iv).

We agree with particular arguments presented by Appellant with respect to anticipation Rejection R2 of claims 1–20.

However, we disagree with Appellant’s arguments with respect to subject matter eligibility Rejections R1 of claims 1–20 and, unless otherwise noted, we incorporate by reference herein and adopt as our own: (1) the findings and reasons set forth by the Examiner in the action from which this appeal is taken, and (2) the reasons and rebuttals set forth in the Examiner’s Answer in response to Appellant’s arguments. We highlight and address specific findings and arguments regarding claim 1 for emphasis as follows.

1. § 101 Rejection R1 of Claims 1–20

Issue 1

Appellant argues (Appeal Br. 10–11; Reply Br. 2–3) the Examiner’s rejection of claim 1 under 35 U.S.C. § 101 as being directed to patent-ineligible subject matter is in error because of (i) the alleged failure to consider the recited term “a retail shopping facility” under a Step 2A analysis and (ii) the term “a retail shopping facility” is clearly integrated into a practical application under Prong 2 of Step 2A. Appeal Br. 10.

Under the USPTO’s Revised Guidance, informed by our governing case law concerning 35 U.S.C. § 101, is claim 1 patent-ineligible under § 101?

Principles of Law

A. 35 U.S.C. § 101

An invention is patent-eligible if it is a “new and useful process, machine, manufacture, or composition of matter.” 35 U.S.C. § 101.⁵ 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) (brackets in original) (citing *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);

⁵ This threshold analysis of whether a claim is directed to one of the four statutory categories of invention, *i.e.*, a process, machine, manufacture, or composition of matter, is referred to as “*Step 1*” in the USPTO’s patent-eligibility analysis under § 101. MPEP § 2106.

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 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. 252, 267–68 (1853))); and manufacturing flour (*Benson*, 409 U.S. at 69 (citing *Cochrane v. Deener*, 94 U.S. 780, 785 (1876))).

Abstract ideas may include, but are not limited to, fundamental economic practices, methods of organizing human activities, and mathematical formulas or relationships. *Alice*, 573 U.S. at 217–21. Under this guidance, we must therefore ensure at step one that we articulate what the claims are directed to with enough specificity to ensure the step one inquiry is meaningful. *Id.* at 217 (“[W]e tread carefully in construing this exclusionary principle lest it swallow all of patent law.”).

Examples of claims that do not recite mental processes because they cannot be practically performed in the human mind include: (a) a claim to a method for calculating an absolute position of a GPS receiver and an absolute time of reception of satellite signals, where the claimed GPS receiver calculated pseudoranges that estimated the distance from the GPS receiver to a plurality of satellites, *SiRF Technology, Inc. v. International Trade Commission*, 601 F.3d 1319, 1331–33 (Fed. Cir. 2010); (b) a claim to detecting suspicious activity by using network monitors and analyzing network packets, *SRI Int’l, Inc. v. Cisco Systems, Inc.*, 930 F.3d 1295, 1304 (Fed. Cir. 2019); (c) a claim to a specific data encryption method for computer communication involving a several-step manipulation of data,

Synopsys, Inc. v. Mentor Graphics Corp., 839 F.3d 1138, 1149 (Fed. Cir. 2016) (distinguishing *TQP Development, LLC v. Intuit Inc.*, 2014 WL 651935 (E.D. Tex. Feb. 19, 2014)) (the specific data encryption method “could not conceivably be performed in the human mind or with pencil and paper”). While a claim limitation to a process that “can be performed in the human mind, or by a human using a pen and paper” qualifies as a mental process, a claim limitation that “could not, as a practical matter, be performed entirely in a human’s mind” (even if aided with pen and paper) would not qualify as a mental process.⁶

In *Diehr*, the claim at issue recited a mathematical formula, but the Supreme Court held “[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.* (citation omitted) (citing *Benson and Flook*); *see, e.g., id.* at 187 (“It is now commonplace that an *application* of a law of nature or mathematical

⁶ *CyberSource Corp. v. Retail Decisions, Inc.*, 654 F.3d 1366, 1372, 1375-76 (Fed. Cir. 2011) (distinguishing *Research Corp. Techs. v. Microsoft Corp.*, 627 F.3d 859 (Fed. Cir. 2010), and *SiRF Tech., Inc. v. Int'l Trade Comm'n*, 601 F.3d 1319 (Fed. Cir. 2010)).

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.*

B. USPTO Revised Guidance

The PTO published revised guidance in the Federal Register concerning the application of § 101. *2019 Revised Patent Subject Matter Eligibility Guidance*, 84 Fed. Reg. 50 (January 7, 2019) (hereinafter “Revised Guidance”) (<https://www.govinfo.gov/content/pkg/FR-2019-01-07/pdf/2018-28282.pdf>). “All USPTO personnel are, as a matter of internal agency management, expected to follow the guidance.” *Id.* at 51; *see also* October 2019 Update at 1 (*October 2019 Update: Subject Matter Eligibility*) (hereinafter “October 2019 Update”).

Under the Revised Guidance, we first look to whether the claim recites:

- (1) any judicial exceptions, including certain groupings of abstract ideas (i.e., mathematical concepts, certain methods

of organizing human activity such as a fundamental economic practice, or mental processes);⁷ and

(2) additional elements that integrate the judicial exception into a practical application (*see* Manual for Patent Examining Procedure (“MPEP”) §§ 2106.05(a)–(c), (e)–(h)).⁸

See Revised Guidance 52–53.

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:

(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, conventional activities previously known to the industry, specified at a high level of generality, to the judicial exception.⁹

See Revised Guidance 56.

Step 2A(i) – Abstract Idea

Informed by our judicial precedent, the Revised Guidance extracts and synthesizes key concepts identified by the courts as abstract ideas to explain that the abstract idea exception includes the following groupings of subject matter, when recited as such in a claim limitation:

(a) Mathematical concepts—mathematical relationships, mathematical formulas or equations, mathematical calculations;

⁷ Referred to as “*Revised Step 2A, Prong 1*” in the Revised Guidance (hereinafter “*Step 2A(i)*”).

⁸ Referred to as “*Revised Step 2A, Prong 2*” in the Revised Guidance (hereinafter “*Step 2A(ii)*”).

⁹ 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*.

(b) 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 social activities, teaching, and following rules or instructions); and

(c) Mental processes—concepts performed in the human mind (including an observation, evaluation, judgment, opinion).

Revised Guidance 52 (footnotes omitted).

Under the Revised Guidance, if the claim does not recite a judicial exception (a law of nature, natural phenomenon, or subject matter within the enumerated groupings of abstract ideas above), then the claim is patent-eligible at *Step 2A(i)*. This determination concludes the eligibility analysis, except in situations identified in the Revised Guidance.¹⁰

However, if the claim recites a judicial exception (i.e., an abstract idea enumerated above, a law of nature, or a natural phenomenon), the claim requires further analysis for a practical application of the judicial exception in *Step 2A(ii)*.

Step 2A(ii) – Practical Application

If a claim recites a judicial exception in *Step 2A(i)*, we determine whether the recited judicial exception is integrated into a practical

¹⁰ In the rare circumstance in which an examiner believes a claim limitation that does not fall within the enumerated groupings of abstract ideas should nonetheless be treated as reciting an abstract idea, the procedure described in of the Guidance for analyzing the claim should be followed. *See* Revised Guidance, Section III.C.

application of that exception in *Step 2A(ii)* by: (a) identifying whether there are any additional elements recited in the claim beyond the judicial exception(s); and (b) evaluating those additional elements individually and in combination to determine whether they integrate the exception into a practical application.

The seven identified “practical application” sections of the MPEP,¹¹ cited in the Revised Guidance under *Step 2A(ii)*, are:

- (1) MPEP § 2106.05(a) Improvements to the Functioning of a Computer or To Any Other Technology or Technical Field
- (2) MPEP § 2106.05(b) Particular Machine
- (3) MPEP § 2106.05(c) Particular Transformation
- (4) MPEP § 2106.05(e) Other Meaningful Limitations
- (5) MPEP § 2106.05(f) Mere Instructions To Apply An Exception
- (6) MPEP § 2106.05(g) Insignificant Extra-Solution Activity
- (7) MPEP § 2106.05(h) Field of Use and Technological Environment

See Revised Guidance 55.

If the recited judicial exception is integrated into a practical application as determined under one or more of the MPEP sections cited above, then the claim is not directed to the judicial exception, and the patent-

¹¹ *See* MPEP §§ 2106.05(a)–(c), (e)–(h). Citations to the MPEP herein refer to revision [R-08.2017]. Sections 2106.05(a), (b), (c), and (e) are indicative of integration into a practical application, while §§ 2106.05(f), (g), and (h) relate to limitations that are not indicative of integration into a practical application.

eligibility inquiry ends. *See* Revised Guidance 54. If not, then analysis proceeds to *Step 2B*.

Step 2B – “Inventive Concept” or “Significantly More”

Under our reviewing courts’ precedent, it is possible that a claim that does not “integrate” a recited judicial exception under *Step 2A(ii)* is nonetheless patent eligible. For example, the claim may recite additional elements that render the claim patent eligible even though one or more claim elements may recite a judicial exception.¹² The Federal Circuit has held claims eligible at the second step of the *Alice/Mayo* test (USPTO *Step 2B*) because the additional elements recited in the claims provided “significantly more” than the recited judicial exception (e.g., because the additional elements were unconventional in combination).¹³ Therefore, if a claim has been determined to be directed to a judicial exception under *Revised Step 2A*, we must also evaluate the additional elements individually and in combination under *Step 2B* to determine whether they provide an inventive concept (i.e., whether the additional elements amount to significantly more than the exception itself).¹⁴

¹² *See, e.g., Diehr*, 450 U.S. at 187.

¹³ *See, e.g., Amdocs, Ltd. v. Openet Telecom, Inc.*, 841 F.3d 1288, 1300, 1304 (Fed. Cir. 2016); *BASCOM Global Internet Services, Inc. v. AT&T Mobility LLC*, 827 F.3d 1341, 1349–52 (Fed. Cir. 2016); *DDR Holdings v. Hotels.com, L.P.*, 773 F.3d 1245, 1257–59 (Fed. Cir. 2014).

¹⁴ The patent eligibility inquiry may contain underlying issues of fact. *Mortg. Grader, Inc. v. First Choice Loan Servs. Inc.*, 811 F.3d 1314, 1325 (Fed. Cir. 2016). In particular, “[t]he question of whether a claim element or combination of elements is well-understood, routine and conventional to a skilled artisan in the relevant field is a question of fact.” *Berkheimer v. HP Inc.*, 881 F.3d 1360, 1368 (Fed. Cir. 2018).

Under the Revised Guidance, we must consider in *Step 2B* whether an additional element or combination of elements: (1) “Adds a specific limitation or combination of limitations that are not well-understood, routine, conventional activity in the field, which is indicative that an inventive concept may be present;” or (2) “simply appends well-understood, routine, conventional activities previously known to the industry, specified at a high level of generality, to the judicial exception, which is indicative that an inventive concept may not be present.” *See Revised Guidance, Section III.B.*¹⁵

In the *Step 2B* analysis, an additional element (or combination of elements) is not well-understood, routine or conventional unless the examiner finds an evidentiary basis, and expressly supports a rejection in writing with, one or more of the following:

1. A citation to an express statement in the specification or to a statement made by an applicant during prosecution that demonstrates the well-understood, routine, conventional nature of the additional element(s). . . .
2. A citation to one or more of the court decisions discussed in MPEP § 2106.05(d)(II) as noting the well-

¹⁵ In accordance with existing *Step 2B* guidance, an Examiner’s finding that an additional element (or combination of elements) is well understood, routine, conventional activity must be supported with at least one of the four specific types of evidence required by the USPTO *Berkheimer* Memorandum, as shown above. For more information concerning evaluation of well-understood, routine, conventional activity, *see* MPEP § 2106.05(d), as modified by the USPTO *Berkheimer* Memorandum (USPTO Commissioner for Patents Memorandum dated Apr. 19, 2018, “Changes in Examination Procedure Pertaining to Subject Matter Eligibility, Recent Subject Matter Eligibility Decision (*Berkheimer v. HP, Inc.*)” (hereinafter “*Berkheimer Memo*”).

understood, routine, conventional nature of the additional element(s).

3. A citation to a publication that demonstrates the well-understood, routine, conventional nature of the additional element(s). . . .

4. A statement that the examiner is taking official notice of the well-understood, routine, conventional nature of the additional element(s). . . .

See Berkheimer Memo 3–4.

If the Examiner or the Board determines under *Step 2B* that the element (or combination of elements) amounts to significantly more than the exception itself, the claim is eligible, thereby concluding the eligibility analysis.

However, if a determination is made that the element and combination of elements do not amount to significantly more than the exception itself, the claim is ineligible under *Step 2B*, and the claim should be rejected for lack of subject matter eligibility.

Analysis

Step 1 – Statutory Category

Claim 1, as an apparatus claim, recites one of the enumerated categories of eligible subject matter in 35 U.S.C. § 101. Therefore, the issue before us is whether it is directed to a judicial exception without significantly more.

Step 2A(i): Does the Claim Recite a Judicial Exception?

The Examiner determined that the limitations of claim 1 “recite the concept of facilitating fulfillment of an order.” Final Act. 4. The Examiner concludes the limitations:

[F]all within the “Mental Processes” and “Certain Methods of Organizing Human Activity” groupings of abstract ideas, enumerated in the 2019 Revised Patent Subject Matter Eligibility Guidance, in that they recite concepts performed in the human mind (i.e. determining that a customer having a retail item available for pickup at the retail shopping facility is currently proximal to the retail shopping facility is an observation/evaluation/judgment/opinion), fundamental economic practices (i.e. facilitating fulfillment of an order), and commercial transactions (i.e. responding to that determination by sending the customer a message wherein the message includes an opportunity for the customer to indicate that they will now pick up the retail item at the retail shopping facility is a sales activity/behavior).

Final Act. 4–5. *See also* Ans. 4.

Appellant argues (Appeal Br. 10–11; Reply Br. 2–3) the Examiner’s rejection of claim 1 under 35 U.S.C. § 101 as being directed to patent-ineligible subject matter is in error because she failed to consider the recited term “a retail shopping facility” under a Step 2A analysis. Appeal Br. 10. However, the Examiner explains “A brick and mortar store is not a machine.” Ans. 5.

We conclude claim 1 does not recite the judicial exceptions of either natural phenomena or laws of nature. We evaluate, *de novo*, whether claim 1 recites an abstract idea based upon the Revised Guidance.

First, we look to the Specification to provide context as to what the claimed invention is directed to. In this case, the Specification discloses that the invention relates “generally to retail shopping facilities and more particularly to accommodating customers who visit the facility to pick up a previously ordered item.” Spec. 2.

Appellant's Abstract describes the invention as:

A central computer system for a retail shopping facility automatically determines that a customer having a retail item available for pickup at the facility is currently proximal to the facility and automatically responds by sending the customer a message that includes an opportunity for the customer to indicate that they will now pick up the retail item. Upon receiving information indicating that the customer utilized the aforementioned opportunity to indicate that they will now pick up the retail item, the central computer system can instigate a transmission of a message to at least one associate of the retail shopping facility to prompt the associate to move the retail item from a first area of the retail shopping facility (such as a non-public storage area) to a second area of the retail shopping facility (such as a designated pick-up area).

Spec. 15 (Abstract).

In TABLE I below, we identify in *italics* the specific claim limitations in claim 1 that we conclude recite an abstract idea. We additionally identify in **bold** the additional (non-abstract) claim limitations that are generic computer components and techniques, and underline limitations representing extra or post-solution activity:

TABLE I

Independent Claim 1	Revised Guidance
An apparatus comprising:	An apparatus (machine) is a statutory subject matter class. <i>See</i> 35 U.S.C. § 101. <i>See</i> 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.”).
[L1] a retail shopping facility;	As a matter of claim construction, we conclude the retail shopping facility is not reasonably construed as being a part of the claimed apparatus but rather represents an environment of use.
[L2] a network interface;	A computer network interface is a generic computer component
[L3] a central computer system for the retail shopping facility and that is operably coupled to the network interface and configured to:	As claimed, a central computer system coupled to a network interface is an arrangement of generic computer components. <i>See buySAFE, Inc. v. Google, Inc.</i> , 765 F.3d 1350, 1355 (Fed. Cir. 2014) (computer receives and sends information over a network).
[L4] <i>automatically determine that a customer having a retail item available for pickup at the retail shopping facility is currently proximal to the retail shopping facility and</i>	“[D]etermin[ing] that a customer . . . is currently proximal to the . . . facility” is an abstract idea, i.e., an observation, evaluation, judgment, opinion” which could be performed

Independent Claim 1	Revised Guidance
	as a mental process. <i>See</i> Revised Guidance 52. ¹⁶
<p>[L5a] <i>automatically responding to that determination by</i></p> <p>[L5b] <u>sending the customer a message wherein the message includes an opportunity for the customer to indicate that they will now pick up the retail item at the retail shopping facility.</u></p>	<p>“[R]esponding” to the determination (of customer proximity) is an abstract idea, i.e., a certain method of organizing human activity in the form of a commercial interaction, i.e., a sales activity. <i>See</i> Revised Guidance 52.</p> <p>Sending a message is insignificant post-solution activity. 2019 Revised Guidance 55, n.31; <i>see also</i> MPEP § 2106.05(g).</p>

Appeal Br. 13 (Claims App.)(bracketed labeling added).

Under the broadest reasonable interpretation standard,¹⁷ and aside from any claimed computer-related aspects, we conclude limitations [L4]

¹⁶ The “‘mere automation of manual processes using generic computers’ . . . ‘does not constitute a patentable improvement in computer technology,’” *Trading Techs. Int’l v. IBG LLC*, 921 F.3d 1378, 1384 (Fed. Cir. 2019) (quoting *Credit Acceptance Corp. v. Westlake Servs.*, 859 F.3d 1044, 1055 (Fed. Cir. 2017)).

¹⁷ During prosecution, claims must be given their broadest reasonable interpretation when reading claim language in light of the specification as it would be interpreted by one of ordinary skill in the art. *In re Am. Acad. of Sci. Tech. Ctr.*, 367 F.3d 1359, 1364 (Fed. Cir. 2004). Under this standard, we interpret claim terms using “the broadest reasonable meaning of the words in their ordinary usage as they would be understood by one of ordinary skill in the art, taking into account whatever enlightenment by way of definitions or otherwise that may be afforded by the written description contained in the applicant’s specification.” *In re Morris*, 127 F.3d 1048, 1054 (Fed. Cir. 1997).

and [L5a] identified in TABLE I above, recite abstract functions that would ordinarily be executed when facilitating fulfillment of an order. *See* Final Act. 4.

We determine that claim 1, overall, recites certain methods of organizing human activity in the form of commercial transactions, i.e., sales activities, and alternatively, claim 1 recites fundamental economic principles or practices. This type of activity, i.e., sending a message to customers to pick up their retail item, for example, is emblematic of a commercial transaction, a sales activity and an economic practice.¹⁸

Thus, under *Step 2A(i)*, while we generally agree with the Examiner that claim 1 recites an abstract idea, we differ in some respects as to the specific categorization of the various abstract ideas recited in claim 1, and to the specific characterization of claim 1, as a whole. We conclude claim 1, under our Revised Guidance, recites a judicial exception of a certain method of organizing human activity in the form of commercial interactions, i.e., sales activities (“facilitating fulfillment of an order”) and, alternatively, we

¹⁸ Our reviewing court recognizes that “[a]n abstract idea can generally be described at different levels of abstraction.” *Apple, Inc. v. Ameranth, Inc.*, 842 F.3d 1229, 1240 (Fed. Cir. 2016). That need not and, in this case does not, “impact the patentability analysis.” *Id.* at 1241. Further, “[t]he Board’s slight revision of its abstract idea analysis does not impact the patentability analysis.” *Id.* Moreover, merely combining several abstract ideas does not render the combination any less abstract. *RecogniCorp, LLC v. Nintendo Co.*, 855 F.3d 1322, 1327 (Fed. Cir. 2017) (“Adding one abstract idea (math) to another abstract idea . . . does not render the claim non-abstract.”); *see also 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).

conclude claim 1 recites a fundamental economic practice. In either case, we conclude claim 1 recites an abstract idea.

Step 2A(ii): Judicial Exception Integrated into a Practical Application?

If the claims recite a judicial exception, as we conclude above, we proceed to the “practical application” *Step 2A(ii)* in which we determine whether the recited judicial exception is integrated into a practical application of that exception by: (a) identifying whether there are any additional elements recited in the claim beyond the judicial exception(s); and (b) evaluating those additional elements individually and in combination to determine whether they integrate the exception into a practical application.

As to the specific limitations, we conclude limitation [L1], “a retail shopping facility,” does not recite extra-solution activity, an abstract idea, or well-understood, routine and conventional components, but instead merely recites an *environment of use* of the other recited generic computer components. We note the structure of a generic computer component does not change when moved to a particular location (environment). We further conclude limitation [L5b] recites insignificant post solution activity. The Supreme Court guides that the “prohibition against patenting abstract ideas ‘cannot be circumvented by’ . . . adding ‘insignificant postsolution activity.’” *Bilski*, 561 U.S. at 610–11 (quoting *Diehr*, 450 U.S. at 191–92). On this record, we are of the view that Appellant’s claims do not operate the recited generic computer components (i.e., limitations L2 and L3) in an unconventional manner to achieve an improvement in computer functionality. *See* MPEP § 2106.05(a).

We are not persuaded by Appellant’s somewhat unclear argument that the “apparatus” comprises “a retail shopping facility,” and thus integrates the recited abstract ideas into a practical application. Appeal Br. 10. We find each of the other limitations of claim 1 either recite abstract ideas, extra-solution activity, or generic computer components as identified in *Step 2A(i)*, *supra* (see TABLE I, L2 and L3), and none of the limitations integrate the judicial exception of facilitating fulfillment of an order into a practical application as determined under one or more of the MPEP sections cited above. The claim as a whole merely uses instructions to implement the abstract idea on a computer or, alternatively, merely uses a computer as a tool to perform the abstract idea in the environment of a retail shopping center.

Thus, on this record, Appellant has not shown an improvement or practical application under the guidance of MPEP section 2106.05(a) (“Improvements to the Functioning of a Computer or to Any Other Technology or Technical Field”) or section 2106.05(e) (“Other Meaningful Limitations”).

Therefore, we conclude the abstract idea is not integrated into a practical application, and thus the claim is directed to the judicial exception.

Step 2B – “Inventive Concept” or “Significantly More”

If the claims are directed to a judicial exception, and not integrated into a practical application, as we conclude above, we proceed to the “inventive concept” step. For *Step 2B* we must “look with more specificity at what the claim elements add, in order to determine ‘whether they identify

an “inventive concept” in the application of the ineligible subject matter’ to which the claim is directed.” *Affinity Labs*, 838 F.3d at 1258.

In applying step two of the *Alice* analysis, our reviewing court guides 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. *Ultramercial, Inc. v. Hulu, LLC*, 772 F.3d 709, 715 (Fed. Cir. 2014). 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. *Alice*, 573 U.S. at 221. Those “additional features” must be more than “well-understood, routine, conventional activity.” *Mayo*, 566 U.S. at 79.

Limitations referenced in *Alice* that are not enough to qualify as “significantly more” when recited in a claim with an abstract idea include, as non-limiting or non-exclusive examples: adding the words “apply it” (or an equivalent) with an abstract idea¹⁹; mere instructions to implement an abstract idea on a computer²⁰; or requiring no more than a generic computer to perform generic computer functions that are well-understood, routine and conventional activities previously known to the industry.²¹

¹⁹ *Alice*, 573 U.S. at 221–23.

²⁰ *Alice*, 573 U.S. at 222–23, e.g., simply implementing a mathematical principle on a physical machine, namely a computer.

²¹ *Alice*, 573 U.S. at 225 (explaining using a computer to obtain data, adjust account balances, and issue automated instructions involves computer functions that are well-understood, routine, conventional activities).

Evaluating representative claim 1 under step 2 of the *Alice* analysis, we conclude it lacks an inventive concept that transforms the abstract idea of facilitating fulfillment of an order, i.e., determining that a customer having a retail item available for pick up is proximate to the retail shopping facility, and sending a related message to the customer, into a patent-eligible application of that abstract idea.

The patent eligibility inquiry may contain underlying issues of fact. *Mortg. Grader*, 811 F.3d at 1325. In particular, “[t]he question of whether a claim element or combination of elements is well-understood, routine and conventional to a skilled artisan in the relevant field is a question of fact.” *Berkheimer*, 881 F.3d at 1368.

As required under *Berkheimer*, the Examiner provides a particular type of evidence of the well-understood, routine, and conventional nature of the recited computer function²² by concluding,

claim 1 merely recites the additional elements in order to further define the field of use of the abstract idea, therein attempting to generally link the use of the abstract idea to a particular technological environment, such as the Internet or computing networks (see *Ultramerical, Inc. v. Hulu, LLC*. (Fed. Cir. 2014); *Bilski v. Kappas* (2010); MPEP 2106.05(h)).

Ans. 6–9.

Similar to *FairWarning v. Iatric Sys.*, claim 1, executed in a computer environment at a retail shopping facility, “merely indicates a field of use in

²² See *Berkheimer Memo 4* (“A citation to one or more of the court decisions discussed in MPEP § 2106.05(d)(II) as noting the well-understood, routine, conventional nature of the additional element(s)”).

which to apply the abstract idea because this requirement merely limits the claim to the computer field, i.e., to execution on a generic computer.” *Id.*

As further evidence of the conventional nature of the recited “network interface” and “central computer system” in claim 1; and similarly for method claim 11, the Specification discloses: “Network interfaces, including both wireless and non-wireless platforms, are well understood in the art and require no particular elaboration here.” Spec. ¶ 22. The recited “central computer system” is described in general terms also. See Spec. ¶¶ 18–22.

Thus, because the Specification describes the additional elements in general terms, without describing the particulars, we conclude the claim limitations may be broadly but reasonably construed as reciting conventional computer components and techniques, particularly in light of Appellant’s Specification, as quoted above.²³

With respect to the *Step 2B* analysis, we conclude, similar to *Alice*, the recitation of a the recited “network interface” and “central computer system,” neither of which is argued by Appellant, and similarly for method claim 11, is simply not enough to transform the patent-ineligible abstract idea here into a patent-eligible invention under *Step 2B*. See *Alice*, 573 U.S. at 221 (“[C]laims, which merely require generic computer implementation, fail to transform [an] abstract idea into a patent-eligible invention.”).

²³ Claim terms are to be given their broadest reasonable interpretation, as understood by those of ordinary skill in the art and taking into account whatever enlightenment may be had from the Specification. *In re Morris*, 127 F.3d 1048, 1054 (Fed. Cir. 1997).

We conclude the claims fail the *Step 2B* analysis because claim 1, in essence, merely recites various computer-based elements along with no more than mere instructions to implement the identified abstract idea using the computer-based elements.

Therefore, in light of the foregoing, we conclude, under the Revised Guidance, that each of Appellant's claims 1–20, 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, we sustain the Examiner's § 101 rejection of independent claim 1, and grouped claims 2–20, which fall therewith. *See Claim Grouping, supra.*

2. § 102(a)(1) Rejection R2 of Claims 1–20

For essentially the same reasons argued by Appellant (*see generally* Appeal Br. 11–12) we reverse the Examiner's rejection of independent claim 1, and also the rejection of independent claim 11, which recites the dispositive limitation in commensurate form. For the same reasons, we also reverse the rejections of all claims 2–10 and 12–20 that depend therefrom.²⁴

²⁴ Because we agree with at least one of the dispositive arguments advanced by Appellant, we need not reach the merits of Appellant's other arguments. *See Beloit Corp. v. Valmet Oy*, 742 F.2d 1421, 1423 (Fed. Cir. 1984) (finding an administrative agency is at liberty to reach a decision based on “a single dispositive issue”).

Issue 2

Appellant argues (Appeal Br. 11–12) the Examiner’s rejection of claim 1 under 35 U.S.C. § 103(a)(1) as anticipated over Agasti is in error. These contentions present us with the following issue:

Did the Examiner err in finding Agasti discloses a method that uses “a central computer system . . . configured to: automatically determine that a customer having a retail item available for pickup at the retail shopping facility is currently proximal to the retail shopping facility and automatically responding . . . by sending the customer a message,” as recited in claim 1?

Principles of Law

Anticipation of a claim under 35 U.S.C. § 102 occurs when each claimed element and the claimed arrangement or combination of those elements is disclosed, inherently or expressly, by a single prior art reference. *Therasense, Inc. v. Becton, Dickinson & Co.*, 593 F.3d 1325, 1332 (Fed. Cir. 2010). A reference inherently discloses an element of a claim “if that missing characteristic is *necessarily* present, or inherent, in the single anticipating reference.” *Schering Corp. v. Geneva Pharms.*, 339 F.3d 1373, 1377 (Fed. Cir. 2003) (citation omitted) (emphasis added). “Inherency, however, may not be established by probabilities or possibilities. The mere fact that a certain thing *may* result from a given set of circumstances is not sufficient.” *Therasense*, 593 F.3d at 1332 (citing *Cont’l Can Co. USA, Inc. v. Monsanto Co.*, 948 F.2d 1264, 1269 (Fed. Cir. 1991)).

During prosecution, claims must be given their broadest reasonable interpretation when reading claim language in light of the specification as it would be interpreted by one of ordinary skill in the art. *In re Am. Acad. of*

Sci. Tech. Ctr., 367 F.3d 1359, 1364 (Fed. Cir. 2004). Under this standard, we interpret claim terms using “the broadest reasonable meaning of the words in their ordinary usage as they would be understood by one of ordinary skill in the art, taking into account whatever enlightenment by way of definitions or otherwise that may be afforded by the written description contained in the applicant's specification.” *In re Morris*, 127 F.3d 1048, 1054 (Fed. Cir. 1997).

Analysis

Independent Claim 1

Appellant argues:

While claim 1 specifies using a central computer system for a retail shopping facility, Agasti teaches using a *user device*, such as a smartphone, to *itself* determine whether the user is within range of a pickup area and, when such is true, to present the user via that user device with a question to determine whether the user would like to now receive previously-purchased items at a curbside pickup area. At paragraph 0042, Agasti in fact dedicates considerable verbiage and effort to drive home the *point* that it is the *user's* mobile computing device that handles this activity and not some other platform. It is axiomatic that a reference must clearly describe each and every limitation of a claim in order to qualify as an anticipating reference. With all due respect, such is not the case with Agasti. While the applicant's central computer system for a retail sales facility may interact with a user's mobile device, claim 1 nevertheless clearly specifies that it is the central computer system that carries out the foregoing determination and response. For the very simple reason that a central computer system for a retail sales facility is not a customer's smartphone (or similar device), the applicant respectfully submits that the Examiner clearly errs when applying Agasti as an anticipatory reference.

Appeal Br. 11–12.

The Examiner finds Agasti ¶¶ 21, 45, 46 discloses the disputed limitation “a central computer system for the retail shopping facility.” Final Act. 10.

The Examiner additionally finds “[t]he order fulfillment system of Agasti sends the message via the curbside pickup app to the mobile device.” Ans. 6.

We determine error in the Examiner's finding that Agasti's disclosure of a central computer system for a retail shopping facility fully discloses the disputed limitation, and thus we find the rejection does not meet the rigorous requirements of anticipation. In anticipation, “the Board must compare the construed claim to a prior art reference and make factual findings that ‘each and every limitation is found either expressly or inherently in [that] single prior art reference.’” *In re Crish*, 393 F.3d 1253, 1256 (Fed. Cir. 2004).

Our reviewing court guides, under § 102, the prior art reference “must not only disclose all elements of the claim within the four corners of the document, but must also disclose those elements arranged as in the claim.” *Net MoneyIN, Inc. v. VeriSign, Inc.*, 545 F.3d 1359, 1369 (Fed. Cir. 2008) (citation and internal quotation marks omitted). “Thus, it is not enough that the prior art reference discloses part of the claimed invention, which an ordinary artisan might supplement to make the whole, or that it *includes multiple, distinct teachings that the artisan might somehow combine to achieve the claimed invention.*” *Id.* at 1371 (emphasis added).

Therefore, we find the Examiner's cited sections of Agasti does not expressly or inherently disclose an arrangement in which the a central computer system for the retail shopping facility is operably coupled to a network interface, and which is configured to automatically determine that a

customer having a retail item available for pickup is close to the retail shopping facility and, in response thereto, sending the customer a message.

Therefore, based upon the findings above, on this record, we are persuaded of at least one error in the Examiner's reliance on the cited prior art to disclose the dispositive limitation of claim 1, such that we find error in the Examiner's resulting finding of anticipation.

Accordingly, we do not sustain the Examiner's anticipation rejection of independent claim 1, nor do we sustain the anticipation rejection of independent claim 11 which recites the dispositive limitation in commensurate form. For the same reasons, we also do not sustain the Examiner's anticipation Rejection R2 of dependent claims 2–10 and 12–20, which variously depend from independent claims 1 and 11.

REPLY BRIEF

To the extent Appellant *may* advance new arguments in the Reply Brief (Reply Br. 1–6) not in response to a shift in the Examiner's position in the Answer, arguments raised in a Reply Brief that were not raised in the Appeal Brief or are not responsive to arguments raised in the Examiner's Answer will not be considered except for good cause (*see* 37 C.F.R. § 41.41(b)(2)), which Appellant has not shown.

CONCLUSIONS

(1) The Examiner did not err with respect to the patent ineligibility Rejection R1 of claims 1–20 under 35 U.S.C. § 101, and we sustain the rejection.

(2) The Examiner erred with respect to anticipation Rejection R2 of claims 1–20 under 35 U.S.C. § 102(a)(1) over the cited prior art, and we do not sustain the rejection.

Because we have affirmed at least one ground of rejection with respect to each claim on appeal, we affirm the Examiner’s decision. *See* 37 C.F.R. § 41.50(a)(1).

DECISION SUMMARY

Claims Rejected	35 U.S.C. §	Basis / References	Affirmed	Reversed
1–20	101	Subject Matter Eligibility	1–20	
1–20	102(a)(1)	Anticipation Agasti		1–20
Overall Outcome			1–20	

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