UNITED STATES PATENT AND TRADEMARK OFFICE

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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 IVORY WELLMAN KNIPFER, CARL CRAIG MEIER,
DALE WILLIAM PETERSILKA, and
MATTHEW H. ZEMKE

_____

Appeal 2018-008929
Application 13/163,673
Technology Center 3600

_____

Before CAROLYN D. THOMAS, CARL W. WHITEHEAD JR.
and KARA L. SZPONDOWSKI, *Administrative Patent Judges*.

WHITEHEAD JR., *Administrative Patent Judge*.

DECISION ON APPEAL

STATEMENT OF THE CASE

Appellant[1] is appealing the final rejection of claims 1–6, 9–14, and
16–23 under 35 U.S.C. § 134(a). Appeal Brief 6. We have jurisdiction
under 35 U.S.C. § 6(b).

We affirm.

Introduction

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[1] We use the word Appellant to refer to "applicant" as defined in 37 C.F.R.
§ 1.42(a). Appellant identifies International Business Machines
Corporation, as the real party in interest. Appeal Brief 2.

According to Appellant, the invention is directed to a "production system includ[ing] an information handling system (IHS) having a carrier capacity prediction tool that receives a customer order that may include packaging and carrier requirements." Abstract.

Representative Claim

1.   A method, in an information handling system (IHS) having a processor and a memory, the memory comprising instructions which are executed by the processor to specifically configure the processor to implement a carrier capacity prediction tool, the method comprising:

receiving, by the carrier capacity prediction tool of the IHS, a first order for configurable customer goods at a first order time;

determining, by the carrier capacity prediction tool, a complexity level exhibited by the first order based on availability of volumetric weight data in a volumetric weight database, wherein the complexity level comprises at least one of a first complexity level corresponding to a simple order whose volumetric weight is specifically calculated based on specific order characteristic information and specific packaging history information in the volumetric weight database corresponding to the configurable customer goods, and a second complexity level corresponding to a complex order, for which there is insufficient specific order characteristic information and insufficient specific packaging history information for the configurable customer goods in the volumetric weight database, and whose volumetric weight is estimated based on a predictive analysis of the first order using

historical information for similar customer goods of previously processed orders;

determining, by the carrier capacity prediction tool, a carrier capacity for the configurable customer goods corresponding to the first order based on the determined complexity level exhibited by the first order, wherein:

the carrier capacity is specifically calculated based on the specifically calculated volumetric weight of the configurable customer goods in response to the complexity level being the first complexity level,

the carrier capacity is estimated based on an estimation of the volumetric weight of the configurable customer goods in response to the complexity level being the second complexity level, and

the carrier capacity includes volumetric weight of the configurable customer goods of the first order;

generating, by the carrier capacity prediction tool, carrier capacity requirements for the first order based on at least one of the determined or predicted carrier capacity; and

outputting, by the carrier capacity prediction tool, the carrier capacity requirements to a shipping department IHS that operates on the carrier capacity requirements to ship the configurable customer

goods corresponding to the first order, wherein the shipping department IHS:

receives the carrier capacity requirements;

processes the carrier capacity requirements to determine a number of shipping vehicles with an appropriate volume and weight capability to ship the configurable customer goods; and

orders the number of shipping vehicles based on the determination.

Rejection on Appeal

Claims 1–6, 9–14 and 16–23 stand rejected under 35 U.S.C. § 101 as being directed to patent-ineligible subject matter. Final Action 2–3.

ANALYSIS

Rather than reiterate the arguments of Appellant and the Examiner, we refer to the Appeal Brief (filed August 24, 2017), the Reply Brief (filed

September 13, 2018), the Final Action (mailed March 27, 2017) and the

Answer (mailed July 13, 2018), for the respective details.

PRINCIPLES OF LAW

A. Section 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 U.S. 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. *E.g.*, *Alice Corp. v. CLS Bank Int'l*, 573 U.S. 208, 216 (2014).

In determining whether a claim falls within an excluded category, we are guided by the Court's two-part framework, described in *Mayo* and *Alice*. *Id.* at 217–18 (citing *Mayo Collaborative Servs. v. Prometheus Labs., Inc.*, 566 U.S. 66, 75–77 (2012)). 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 rubber products" (*Diamond v. Diehr*, 450 U.S. 175, 191 (1981)); "tanning, dyeing, making waterproof 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))).

In *Diehr*, the claim at issue recited a mathematical formula, but the 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 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 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 part 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 (quotation marks 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.*

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(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 Section 101 Guidance

In January 2019, the U.S. Patent and Trademark Office (USPTO) published revised guidance on the application of § 101. 2019 Revised Patent Subject Matter Eligibility Guidance, 84 Fed. Reg. 50 (Jan. 7, 2019) ("2019 Revised Guidance").[2] "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.

Under the 2019 Revised Guidance and the October 2019 Update, 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) ("Step 2A, Prong One"); and

(2) additional elements that integrate the judicial exception into a practical application (*see* MPEP § 2106.05(a)–(c), (e)–(h) (9th ed. Rev. 08.2017, Jan. 2018)) ("Step 2A, Prong Two").[3]

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[2] In response to received public comments, the Office issued further guidance on October 17, 2019, clarifying the 2019 Revised Guidance. USPTO, *October 2019 Update: Subject Matter Eligibility* (the "October 2019 Update") (available at https://www.uspto.gov/sites/default/files/documents/peg_oct_2019_update.pdf).

[3] This evaluation is performed by (a) identifying whether there are any additional elements recited in the claim beyond the judicial exception, and (b) evaluating those additional elements individually and in combination to

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

Only if a claim (1) recites a judicial exception and (2) does not integrate that exception into a practical application, do we then look, under Step 2B, 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.

2019 Revised Guidance, 84 Fed. Reg. at 52–56.

35 U.S.C. § 101 Rejection

The Examiner determines the claims are patent ineligible under 35 U.S.C. § 101. *See* Final Action 2–3. We agree with the Examiner's determination because the claims are directed to an abstract idea comprising "Mathematical concepts—mathematical relationships, mathematical formulas or equations, mathematical calculations" and do not include additional elements that are sufficient to amount to significantly more than the abstract idea. *See Alice*, 573 U.S. at 217 (describing the two-step framework "for distinguishing patents that claim laws of nature, natural phenomena, and abstract ideas from those that claim patent-eligible applications of those concepts").

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determine whether the claim as a whole integrates the exception into a practical application. *See* 2019 Revised Guidance –Section III(A)(2), 84 Fed. Reg. 54–55.

We are not persuaded the Examiner's rejection is in error. Unless otherwise indicated, we adopt the Examiner's findings and conclusions as our own. We add the following primarily for emphasis and clarification with respect to the 2019 Revised Guidance.

Alice/Mayo—Step 1 (Abstract Idea)
Step 2A–Prongs 1 and 2 identified in the 2019 Revised Guidance

Step 2A, Prong One (Recitation of an Abstract Idea)

"Appellant disagrees with the Final Office Action regarding the conclusion that the claimed invention is directed to an abstract idea." Appeal Brief 7 ("With regard to whether the claims are 'directed to' an abstract idea, the Final Office Action over simplifies and generalizes the claimed invention and makes general conclusory allegations without any evidential support or analysis.").

The Specification discloses:

> [A] method for determining required carrier capacity is disclosed that includes receiving, by a carrier capacity prediction tool, a first order for configurable customer goods at a first order time. The method also includes determining at approximately the first order time, by the carrier capacity prediction tool, if the first order exhibits a first complexity level for which the carrier capacity prediction tool already includes sufficient order characteristic information and sufficient packaging history information to make a carrier capacity prediction for the configurable customer goods corresponding to the first order.

Specification ¶ 3.

> Volumetric weight databases 300 includes part information database 330 that may include volume and weight information. Part information database 330 provides carrier capacity prediction tool 180 with information pertaining to particular part number volume and weight information. Part information database 330 may provide carrier capacity prediction tool 180 with volume and weight information that

carrier capacity prediction tool 180 may accumulate to generate a portion of total volume and weight information for customer order 220, and more particularly for customer goods 255.

Specification ¶ 40.

Carrier capacity prediction tool 180 may employ the information within weight minimum database 335 and weight maximum database 336 to determine boundaries for weight information that pertains to work units 235 and ultimately customer goods 255. In this manner, carrier capacity prediction tool 180 may determine minimum and maximum weight predictions for production system 210 finished goods, such as customer goods 255.

Specification ¶ 50.

Allowed packaging material database 340 includes an available fill volume database 347 and actual volume coefficient database 348. Available fill volume database 34 7 stores information so that carrier capacity prediction tool 180 may determine how much volume for particular customer goods 255 includes fill materials, such as foam padding or shipping peanuts.

Specification ¶55.

Claim 1 recites a method in an IHS with the carrier capacity prediction tool:

[1] determining, by the carrier capacity prediction tool, a complexity level exhibited by the first order based on availability of volumetric weight data in a volumetric weight database, wherein the complexity level comprises at least one of a first complexity level corresponding to a simple order whose volumetric weight is specifically calculated based on specific order characteristic information and specific packaging history information in the volumetric weight database corresponding to the configurable customer goods, and a second complexity level corresponding to a complex order, for which there is insufficient specific order characteristic information and insufficient specific packaging history information for the configurable customer goods in the volumetric weight database, and whose volumetric

is weight is estimated based on a predictive analysis of the first order using historical information for similar customer goods of previously processed orders;

[2] determining, by the carrier capacity prediction tool, a carrier capacity for the configurable customer goods corresponding to the first order based on the determined complexity level exhibited by the first order, wherein:

the carrier capacity is specifically calculated based on the specifically calculated volumetric weight of the configurable customer

goods in response to the complexity level being the first complexity level,

the carrier capacity is estimated based on an estimation of the volumetric weight of the configurable

customer goods in response to the complexity level being the second complexity level, and the carrier capacity includes volumetric weight of the configurable customer goods of the first order;

[3] generating, by the carrier capacity prediction tool, carrier capacity requirements for the first order based on at least one of the determined or predicted carrier capacity.

Accordingly, the claim recites the abstract idea of "Mathematical concepts—mathematical relationships, mathematical formulas or equations, mathematical calculations." *See* 2019 Revised Guidance, Section I (Groupings of Abstract Ideas); *see also* Specification ¶¶ 40–55. Our reviewing court has found claims to be directed to abstract ideas when they recited similar subject matter. *See SAP America, Inc.* v. *InvestPic, LLC,* 898 F.3d 1161, 1163 (Fed. Cir. 2018) (holding that claims to a "series of mathematical calculations based on selected information" are directed to abstract ideas); *Digitech Image Techs., LLC* v. *Elecs. for Imaging, Inc.,* 758 F.3d 1344, 1350 (Fed. Cir. 2014) (holding that claims to a ''process of organizing information through mathematical correlations'' are directed to

an abstract idea); *Bancorp Servs., LLC* v. *Sun Life Assurance Co. of Can. (U.S.),* 687 F.3d 1266, 1280 (Fed. Cir. 2012) (identifying the concept of "managing a stable value protected life insurance policy by performing calculations and manipulating the results" as an abstract idea).[4] Therefore, we conclude the claims recite an abstract idea pursuant to Step 2A, Prong One of the guidance. *See* 2019 Revised Guidance, Section III(A)(1) (Prong One: Evaluate Whether the Claim Recites a Judicial Exception).

Step 2A, Prong Two (Integration into a Practical Application)

Under Prong Two of the 2019 Revised Guidance, we must determine "whether the claim as a whole integrates the recited judicial exception into a practical application of the exception"; it is noted that a "claim that integrates a judicial exception into a practical application will apply, rely on, or use 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." 2019 Revised Guidance, Section III(A)(2).

Appellant argues:

The claims clearly are directed to a specific computer environment implementation that is specifically configured and operating to perform the specific combination of operations to ultimately, through a specific process that did not exist prior the

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[4] *See also 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).

presently claimed invention, as is evident from the lack of any prior art rejections in the Final Office Action, output carrier capacity requirements to a shipping department information handling system that operates on the carrier capacity requirements to ship the configurable customer goods corresponding to the first order.

Appeal Brief 9; *see also* Appeal Brief 11, 12. 14, 16–19, 27, 28.

We find Appellant's arguments unpersuasive, as the claimed recitation of generic computer components (database, processor) do not suffice to render the claims patent eligible. *See* Specification ¶ ¶ 22, 23 and 39-41; *see also Alice*, 573 U.S. at 223 ("[T]he mere recitation of a generic computer cannot transform a patent-ineligible abstract idea into a patent-eligible invention."). We further note, as the Federal Circuit has explained, a "claim for a *new* abstract idea is still an abstract idea." *Synopsis, Inc. v. Mentor Graphics Corp.*, 839 F.3d 1138, 1151 (Fed. Cir. 2016). Even assuming the technique claimed was "[g]roundbreaking, innovative, or even brilliant," that would not be enough for the claimed abstract idea to be patent eligible. *See Ass'n for Molecular Pathology v. Myriad Genetics, Inc.*, 569 U.S. 576, 591 (2013).

Appellant contends, "Appellants are not preempting any alleged abstract idea of determining carrier capacity requirements based on a complexity level that corresponds to an order." Appeal Brief 13–14. The U.S. Supreme Court has described "the concern that drives this exclusionary principle [i.e., the exclusion of abstract ideas from patent eligible subject matter] as one of pre-emption." *Alice*, 573 U.S. at 216. However, characterizing preemption as a driving concern for patent eligibility is not the same as characterizing preemption as the sole test for patent eligibility. As our reviewing court has explained, "[t]he Supreme Court has made clear

that the principle of preemption is the basis for the judicial exceptions to patentability," and "[f]or this reason, questions on preemption are inherent in and resolved by the § 101 analysis." *Ariosa Diagnostics, Inc. v. Sequenom, Inc.*, 788 F.3d 1371, 1379 (Fed. Cir. 2015) (citing *Alice*, 573 U.S. at 216). Although "preemption may signal patent ineligible subject matter, the absence of complete preemption does not demonstrate patent eligibility." *Id.* Moreover, "[w]here a patent's claims are deemed only to disclose patent ineligible subject matter under the [*Alice/Mayo*] framework . . . , preemption concerns are fully addressed and made moot." *Id.*; *see also OIP Techs., Inc. v. Amazon.com, Inc.*, 788 F.3d 1359, 1362–63 (Fed. Cir. 2015) ("[T]hat the claims do not preempt all price optimization or may be limited to price optimization in the e-commerce setting do not make them any less abstract.").

Further, we find Appellant's claims are distinguished from those claims that our reviewing court has found to be patent eligible by virtue of reciting technological improvements to a computer system because claims merely employ a generic processor to implement the abstract idea wherein there is no improvement to the processor itself. *See, e.g.*, *DDR Holdings, LLC v. Hotels.com, L.P.*, 773 F.3d 1245, 1249, 1257 (Fed. Cir. 2014) (holding that claims reciting computer processor for serving "composite web page" were patent eligible because "the claimed solution is necessarily rooted in computer technology in order to overcome a problem specifically arising in the realm of computer networks"); *Visual Memory LLC v. NVIDIA Corp.*, 867 F.3d 1253, 1259 (Fed. Cir. 2017) (holding that claims directed to "an improved computer memory system" having many benefits were patent eligible); *see also* Appeal Brief 9, 16.

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Appellant also argues:

> [T]he present claims are not "directed to" any alleged abstract idea, even if they "involve" an abstract idea, *arguendo,* and in fact recite an improvement to computer-related technology by improving the functionality of computer-related technology with regard to determining a carrier capacity requirement for an order based on a determined complexity level of the order, which is determined based on availability of volumetric weight data, and providing that carrier capacity requirement to a shipping department information handling system to ship configurable customer goods corresponding to the order.

Appeal Brief 21; *see also* Appeal Brief 22–27.

We do not find Appellants' arguments persuasive because the claims utilize a processor without any improvement to the functioning of the processor itself. *See generally* Specification; Appeal Brief 19–22; s*ee also Enfish, LLC v. Microsoft Corp.*, 822 F.3d 1327, 1335–36 (Fed. Cir. 2016) (distinguishing between "claims are directed to an improvement to computer functionality versus being directed to an abstract idea" or whether "the focus of the claims is on the specific asserted improvement in computer capabilities . . . or, instead, on a process that qualifies as an 'abstract idea' for which computers are invoked merely as a tool."). The claims do not recite an additional element or elements that reflect an improvement in the functioning of a computer, or an improvement to other technology or technical field. *See Alice*, 573 U.S. at 222 ("In holding that the process was patent ineligible, we rejected the argument that 'implement[ing] a principle in some specific fashion' will 'automatically fal[l] within the patentable subject matter of § 101.'" (Alterations in original) (quoting *Parker v. Flook*, 437 U.S. 584, 593 (1978))).

In *McRO*[5], the Federal Circuit concluded that the claim, when considered as a whole, was directed to a "technological improvement over the existing, manual 3-D animation techniques" through the "use [of] limited rules . . . specifically designed to achieve an improved technological result in conventional industry practice." *McRO*, 837 F.3d at 1316. Specifically, the Federal Circuit found that the claimed rules allowed computers to produce accurate and realistic lip synchronization and facial expressions in animated characters that previously could only be produced by human animators; and the rules were limiting because they defined morph weight sets as a function of phoneme sub-sequences. *McRO*, 837 F.3d at 1313 (internal citations omitted).

We find insufficient evidence of record here that the present situation is like the one in *McRO* where computers were unable to make certain subjective determinations, i.e., regarding morph weight and phoneme timings, which could only be made prior to the claimed invention by human animators. *See* Appeal Brief 22–24. The Background section of the *McRO* '576 patent includes a description of the admitted prior art method and the shortcomings associated with that prior method. *See McRO*, 837 F.3d at 1303–06. There is no comparable discussion in Appellant's Specification or elsewhere of record. For example, see Appeal Brief 24 ("Thus, similar to the McRO patent, the present claims are patent eligible ***because the claimed process uses different techniques from those that have previously been accomplished only manually***."), it is of note, that "[M]ere automation of manual processes using generic computers does not constitute a patentable

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[5] *McRO, Inc. v. Bandai Namco Games America Inc.*, 837 F.3d 1299, 1303 (Fed. Cir. 2016).

improvement in computer technology." *Credit Acceptance Corp. v. Westlake Services*, 859 F.3d 1044, 1055 (Fed. Cir. 2017).

Subsequently, we detect no additional element (or combination of elements) recited in Appellant's representative claim 1 that integrates the judicial exception into a practical application. *See* 2019 Revised Guidance, Section III(A)(2). For example, Appellant's claimed additional elements (e.g., processor, database) do not: (1) improve the functioning of a computer or other technology; (2) are not applied with any particular machine (except for a generic computer); (3) do not effect a transformation of a particular article to a different state; and (4) are not applied in any 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(a)–(c), (e)–(h).

Accordingly, we determine the claim does not integrate the recited judicial exception into a practical application. *See* 2019 Revised Guidance, Section III(A)(2) (Prong Two: If the Claim Recites a Judicial Exception, Evaluate Whether the Judicial Exception Is Integrated Into a Practical Application).

Alice/Mayo—Step 2 (Inventive Concept) *Step 2B identified in the 2019 Revised Guidance*

Step 2B

Next, we determine whether the claim includes additional elements that provide significantly more than the recited judicial exception, thereby providing an inventive concept. *Alice*, 573 U.S. at 217–18 (*quoting Mayo Collaborative Servs. v. Prometheus Labs., Inc.*, 566 U.S. 66, 72–73 (2012)).

Appellant argues the "Examiner has failed to provide any evidence that would demonstrate that Appellants are merely reciting generic functionality of a generic computing device, i.e. a computing device performing operations that are well-understood, routine, or conventional. Reply Br. 9; *see Berkheimer v. HP Inc.*, 881 F.3d 1360 (Fed. Cir. 2018). 2019 Revised Guidance, Section III (B) (footnote 36) states (emphasis added):

> In accordance with existing guidance, <u>an examiner's conclusion that an additional element (or combination of elements) is well understood, routine, conventional activity must be supported with a factual determination</u>. For more information concerning evaluation of well-understood, routine, conventional activity, *see* MPEP 2106.05(d), as modified by the USPTO *Berkheimer* Memorandum[6].

The *Berkheimer* Memorandum Section III (A) states when formulating rejections, "[i]n a step 2B analysis, an additional element (or combination of elements) is not well-understood, routine or conventional unless the examiner finds, and expressly supports a rejection in writing." The *Berkheimer* Memorandum provides four criteria for the Examiner to utilize to provide support for the additional elements to be considered to be well-understood, routine, or conventional. [7]

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[6] "Changes in Examination Procedure Pertaining to Subject Matter Eligibility, Recent Subject Matter Eligibility Decision (*Berkheimer v. HP, Inc.*)." April 19, 2018.

[7] *Berkheimer* Memorandum Section III (A) (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

The Examiner determines in the Answer's Response to Arguments section that:

> In fact, the ordering step of the present invention is well understood, routine activity in the shipping industry, and when combined with the other steps of the claims leads to a combination of steps that are no more than well understood, routine, conventional activity in the shipping industry for years. In addition, with reference to Applicant's specification, paragraph 2 of the background admits that order fulfillment including shipment of customer goods is normal. Also, as discussed in MPEP, 2106.05(d)(II), Examiner cites to the following court decisions as noting the well-understood, routine, conventional nature of the steps of the claims: Recording a customer's order, *Apple, Inc.* v. *Ameranth, Inc.,* 842 F3d 1229, 1244, 120 USPQ2d 1844, 1856 (Fed. Cir. 2016); and also Electronic recordkeeping, *Alice Corp.,* 134 S, Ct. at 2359, 110 USPQ2d at 1984 (creating and maintaining "shadow accounts") since the steps of the claims are merely processing the final WURC action of ordering shipments for the customer.

Answer 13–14.

Consequently, we do not find Appellant's argument persuasive because in determining if the additional element (or combination of additional elements) represents well-understood, routine, conventional activity, the Examiner supported the determination based upon a factual

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

determination as specified in the *Berkheimer* Memorandum. *See*

Berkheimer Memorandum Section III (A)(1),(2); Answer 13–14.

> Appellant further argues:

> Applying similar analysis to the present claims, one can clearly see that the claims are directed to an ordered combination of elements that sets forth a technology-based solution to a computer-based problem, namely carrier capacity requirement determinations based on complexity levels associated with orders where the complexity level is determined based on availability of volumetric weight data in a volumetric weight database, and the ordering of shipping vehicles to provide a required carrier capacity for shipping configurable customer goods.

Reply Brief 4; *see Bascom Global Internet Servs., Inc. v. AT&T Mobility LLC*, 827 F.3d 1314 (Fed. Cir. 2016).

In *Bascom*, our reviewing court found that while the claims of the patent were directed to an abstract idea, the patentee alleged an "inventive concept can be found in the ordered combination of the claim limitations that transform the abstract idea of filtering content into a particular, practical application of that abstract idea." *Bascom*, 827 F.3d at 1352. In particular, the patent claimed "a technology-based solution (not an abstract-idea-based solution implemented with generic technical components in a conventional way) to filter content on the Internet that overcomes existing problems with other Internet filtering systems." *Bascom*, 827 F.3d at 1351. In contrast, Appellant's claim 1 is immediately distinguishable, as it recites an abstract-idea-based solution, that is, carrier capacity prediction, implemented with generic technical components (processor, database), in a conventional way. (*See generally* Specification). Therefore, we are not persuaded that ordered

combinations of steps in claim 1 provide an inventive concept. *See* 2019 Revised Guidance at 56.

Accordingly, we conclude claims 1–6, 9–14 and 16–23 are directed to using Mathematical concepts—mathematical relationships, mathematical formulas or equations, mathematical calculations identified in the 2019 Revised Guidance and are therefore directed to an abstract idea wherein the claims do not recite limitations that amount to significantly more than the abstract idea itself. We sustain the Examiner's § 101 rejection of claims 1–6, 9–14 and 16–23.

CONCLUSION

Claims Rejected	35 U.S.C. §	Basis	Affirmed	Reversed
1–6, 9–14, 16–23	101	Eligibility	1–6, 9–14, 16–23	

No time period for taking any subsequent action in connection with this appeal may be extended under 37 C.F.R. § 1.136(a)(1). *See* 37 C.F.R. § 1.136(a)(1)(v).

AFFIRMED