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BEFORE THE PATENT TRIAL AND APPEAL BOARD

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*Ex parte* ROBERT STOWE

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Appeal 2018-002347<sup>1</sup>  
Application 10/860,670<sup>2</sup>  
Technology Center 3600

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Before NINA L. MEDLOCK, PHILIP J. HOFFMANN, and  
AMEE A. SHAH, *Administrative Patent Judges*.

MEDLOCK, *Administrative Patent Judge*.

DECISION ON APPEAL

STATEMENT OF THE CASE

Appellant appeals under 35 U.S.C. § 134(a) from the Examiner’s final rejection of claims 13–15, 66, 68, 70–76, 79, and 80. We have jurisdiction under 35 U.S.C. § 6(b).

We AFFIRM.

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<sup>1</sup> Our decision references Appellant’s Appeal Brief (“App. Br.,” filed August 3, 2017) and Reply Brief (“Reply Br.,” filed January 3, 2018), and the Examiner’s Answer (“Ans.,” mailed November 3, 2017), Advisory Action (“Adv. Act.,” mailed April 18, 2017), and Final Office Action (“Final Act.,” mailed November 4, 2016).

<sup>2</sup> Appellant identifies United Parcel Service of America, Inc. as the real party in interest. App. Br. 2.

## CLAIMED INVENTION

Appellant's claimed invention relates to "methods of aggregating multiple parcels intended for delivery at a location into a minimum number of deliveries at that location" (Spec. § 1).

Claims 13 and 70 are the independent claims on appeal. Claim 13, reproduced below with bracketed notations added, is illustrative of the claimed subject matter:

13. A system for aggregating the delivery of parcels to a customer by a carrier, said system comprising:

an apparatus comprising at least one processor and at least one memory, wherein the processor is configured to:

[(a)] receive an indication that a first parcel has been shipped for delivery, in a first shipping route, to a detected location of the customer, said first parcel having a known first delivery date;

[(b)] receive an indication that a second parcel has been shipped for delivery, in a second shipping route, to the detected location of the customer, said second parcel having a known second delivery date that is different from the first delivery date;

[(c)] expedite delivery of the second parcel after receipt of said indications, when said second delivery date is after the first delivery date by:

(1) associating a higher class of service offered by the carrier for the second parcel such that the second delivery date is adjusted to coincide with the first delivery date and the first parcel and the second parcel are delivered, via a delivery vehicle of the carrier, in a single delivery to the location of the customer on the first delivery date; and

(2) associating a shipping rate with the first parcel that is discounted from the carrier's normal shipping rate for the first parcel in response to detecting a flag, stored in a database, comprising

coded indicia indicating that the first parcel and the second parcel are in the single delivery; and  
[(d)] delay delivery of the second parcel by the carrier after receiving said indications, when said second delivery date is before the first delivery date by:

(1) associating the second delivery date with the first parcel such that the first parcel and the second parcel are delivered, via the delivery vehicle, in a single delivery to the location of the customer on the first delivery date; and

(2) associating a shipping rate with the second parcel that is discounted from the carrier's normal shipping rate for the second parcel in response to detecting the flag, stored in the database, comprising the coded indicia indicating that the first parcel and the second parcel are in the single delivery.

### REJECTIONS<sup>3</sup>

Claims 13–15, 66, 68, 70–76, 79, and 80 are rejected under 35 U.S.C. § 101 as directed to a judicial exception without significantly more.

### ANALYSIS

Appellant argues the pending claims as a group (App. Br. 7–21). We select independent claim 13 as representative. The remaining claims stand or fall with claim 13. *See* 37 C.F.R. §41.37(c)(1)(iv).

Under 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. The Supreme Court, however, has long interpreted § 101 to include an implicit exception: “[l]aws of nature, natural phenomena, and

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<sup>3</sup> Claims 77 and 78 have been canceled, and the rejections of those claims under §§ 101 and 112(a) have been withdrawn. *See* Adv. Act. 2.

abstract ideas” are not patentable. *Alice Corp. v. CLS Bank Int’l*, 573 U.S. 208, 216 (2014).

The Supreme Court, in *Alice*, reiterated the two-step framework previously set forth in *Mayo Collaborative Services v. Prometheus Laboratories, Inc.*, 566 U.S. 66 (2012), “for distinguishing patents that claim laws of nature, natural phenomena, and abstract ideas from those that claim patent-eligible applications of those concepts.” *Alice Corp.*, 573 U.S. at 217. The first step in that analysis is to “determine whether the claims at issue are directed to one of those patent-ineligible concepts.” *Id.* If the claims are not directed to a patent-ineligible concept, e.g., an abstract idea, the inquiry ends. Otherwise, the inquiry proceeds to the second step where the elements of the claims are considered “individually and ‘as an ordered combination’” to determine whether there are additional elements that “‘transform the nature of the claim’ into a patent-eligible application.” *Id.* (quoting *Mayo*, 566 U.S. at 79, 78). This is “a search for an ‘inventive concept’ — *i.e.*, an element or combination of elements that is ‘sufficient to ensure that the patent in practice amounts to significantly more than a patent upon the [ineligible concept] itself.’” *Id.* at 217–18 (alteration in original).

In rejecting the pending claims under 35 U.S.C. § 101, the Examiner determined that the claims are directed to “aggregating parcels shipped by one or more shippers for a single delivery to the location in order to reduce multiple deliveries,” which the Examiner concluded is, *inter alia*, “the automation of human activity,” and, therefore, an abstract idea (Final Act. 5). The Examiner also determined that the claims do not include additional elements that are sufficient to amount to significantly more than the abstract idea itself (*id.* at 5–6).

After Appellant's briefs were filed in this appeal, and the Examiner's Answer mailed, the USPTO published revised guidance for use by USPTO personnel in evaluating subject matter eligibility under 35 U.S.C. § 101. 2019 REVISED PATENT SUBJECT MATTER ELIGIBILITY GUIDANCE, 84 Fed. Reg. 50, 57 (Jan. 7, 2019) (the "2019 Revised Guidance"). That guidance revised the USPTO's examination procedure with respect to the first step of the *Mayo/Alice* framework by (1) providing groupings of subject matter that is considered an abstract idea; and (2) clarifying that a claim is not "directed to" a judicial exception if the judicial exception is integrated into a practical application of that exception. *Id.* at 50. The 2019 Revised Guidance, by its terms, applies to all applications, and to all patents resulting from applications, filed before, on, or after January 7, 2019. *Id.*

*Step One of the Mayo/Alice Framework (2019 Revised Guidance, Step 2A)*

The first step in the *Mayo/Alice* framework, as mentioned above, is to determine whether the claims at issue are "directed to" a patent-ineligible concept, e.g., an abstract idea. *Alice Corp.*, 573 U.S. at 217. This first step, as set forth in the 2019 Revised Guidance (i.e., Step 2A), is a two-prong test; in Step 2A, Prong One, we look to whether the claim recites a judicial exception, e.g., one of the following three groupings of abstract ideas: (1) mathematical concepts; (2) certain methods of organizing human activity, e.g., fundamental economic principles or practices, commercial or legal interactions; and (3) mental processes. *Id.* at 54. If so, we next consider whether the claim includes additional elements, beyond the judicial exception, "that integrate the [judicial] exception into a practical application," i.e., that 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 (“Step 2A, Prong Two”). *Id.* at 54–55. Only if the claim (1) recites a judicial exception and (2) does not integrate that exception into a practical application do we conclude that the claim is “directed to” the judicial exception, e.g., an abstract idea.

We are not persuaded here that the Examiner erred in determining that the claims are directed to an abstract idea or that the Examiner otherwise oversimplified the concept to which the claims are directed without taking the actual claim language into account (App. Br. 10-18; *see also* Reply Br. 2–3). There is no requirement that the Examiner’s formulation of the abstract idea copy the claim language. And, as described below, the Examiner’s characterization of the claims here is fully consistent with the Specification.<sup>4</sup>

The Federal Circuit has explained that “the ‘directed to’ inquiry applies a stage-one filter to claims, considered in light of the [S]pecification, based on whether ‘their character as a whole is directed to excluded subject

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<sup>4</sup> Moreover, an abstract idea can be expressed at various levels of abstraction. *See Apple, Inc. v. Ameranth, Inc.*, 842 F.3d 1229, 1240 (Fed. Cir. 2016) (“An abstract idea can generally be described at different levels of abstraction. As the Board has done, the claimed abstract idea could be described as generating menus on a computer, or generating a second menu from a first menu and sending the second menu to another location. It could be described in other ways, including, as indicated in the specification, taking orders from restaurant customers on a computer.”). That the claim language includes more words than the phrase the Examiner used to articulate the abstract idea, and that the Examiner, thus, articulates the abstract idea at a higher level of abstraction than would Appellant is an insufficient basis for determining that the claims are not directed to an abstract idea.

matter.’” *Enfish, LLC v. Microsoft Corp.*, 822 F.3d 1327, 1335 (Fed. Cir. 2016) (quoting *Internet Patents Corp.*, 790 F.3d at 1346). It asks whether the focus of the claims is on a specific improvement in relevant technology or on a process that itself qualifies as an “abstract idea” for which computers are invoked merely as a tool. *See id.* at 1335–36. Here, it is clear from the Specification, including the claim language, that the claims focus on an abstract idea, and not on any improvement to technology and/or a technical field.

The Specification is entitled “MULTI-PACKAGE DELIVERY METHODS,” and states that the field of the invention is, specifically, “methods of aggregating multiple parcels intended for delivery at a location into a minimum number of deliveries at that location” (Spec. ¶ 1). The Specification describes, in the “Description of Related Art” section, that in many instances, carriers, e.g., UPS, FedEx, may make multiple deliveries to a single location on a single day — a process that not only is inefficient but also can be costly to the carriers (*id.* ¶ 2). One way to reduce costs and inefficiencies is to have customers pick up their parcels at a distribution facility; however, this may be inconvenient for the customer and not provide the level of service that the customer desires (*id.*).

The claimed invention is ostensibly intended to reduce the costs and inefficiencies associated with the delivery process, while providing a high level of service to the carrier’s customers, by aggregating the delivery of multiple parcels to a location such the number of deliveries to that location decreases and the number of parcels in each delivery increases (*id.* ¶ 4). The Specification, thus, describes that if, for example, a customer orders an item to be delivered in two days but already has a first parcel in transit scheduled



to be delivered on the third day, the customer may be asked to wait an additional day to receive the second parcel so that it may be aggregated for delivery with the first parcel (*id.*). As another example, if a first parcel, in transit, is scheduled for delivery the next day, the customer may be able to get next-day delivery for the second parcel so that the first and second parcels may be aggregated for delivery (*id.*). In some instances, the customer may be provided shipping discounts to offset the cost of the higher class of delivery service, e.g., next-day air (*id.*).

Consistent with this discussion, claim 13 recites a system for aggregating the delivery of parcels to a customer comprising an apparatus having at least one processor configured to: (1) receive an indication that a first parcel, having a first delivery date, has been shipped to a customer location, i.e., “receive an indication that a first parcel has been shipped for delivery, in a first shipping route, to a detected location of the customer, said first parcel having a known first delivery date” (step (a)); (2) receive an indication that a second parcel, having a second delivery date different from the first delivery date, has been shipped to the customer location, i.e., “receive an indication that a second parcel has been shipped for delivery, in a second shipping route, to the detected location of the customer, said second parcel having a known second delivery date that is different from the first delivery date” (step (b)); (3) expedite delivery of the second parcel if the second delivery date is after the first delivery date so that the second delivery date coincides with the first delivery date, i.e., “expedite delivery of the second parcel after receipt of said indications, when said second delivery date is after the first delivery date” (step (c)); and (4) delay delivery of the second parcel if the second delivery date is before the first delivery date so

that the first parcel and the second parcel are in a single delivery, i.e., “delay delivery of the second parcel by the carrier after receiving said indications, when said second delivery date is before the first delivery date” (step (d)). Simply put, claim 13 recites aggregating multiple parcels for a single delivery to a customer location by (1) collecting information (i.e., indications that a first parcel having a first delivery date and a second parcel having a second delivery date have been shipped to a customer location); (2) analyzing the information (i.e., comparing the first and second delivery dates); and (3) using rules to identify options (i.e., expediting delivery of the second parcel if the second delivery data is later than the first delivery date and delaying delivery of the second parcel if the second delivery date is earlier than the first delivery date (Final Act. 2–3)). Given their broadest reasonable interpretation, these limitations, thus, recite a commercial interaction, i.e., a method of organizing human activity, and, therefore, an abstract idea. *See* 2019 Revised Guidance, 84 Fed. Reg. at 52.

The Federal Circuit has held similar concepts to be abstract. Thus, for example, the Federal Circuit has held that abstract ideas include the concepts of collecting data, analyzing the data, and reporting the results of the collection and analysis, including when limited to particular content. *See, e.g., Intellectual Ventures I LLC v. Capital One Fin. Corp.*, 850 F.3d 1332, 1340 (Fed. Cir. 2017) (identifying the abstract idea of collecting, displaying, and manipulating data); *Elec. Power Grp., LLC v. Alstom S.A.*, 830 F.3d 1350, 1354 (Fed. Cir. 2016) (characterizing collecting information, analyzing information by steps people go through in their minds, or by mathematical algorithms, and presenting the results of collecting and analyzing information, without more, as matters within the realm of abstract

ideas); *see also SAP America, Inc. v. InvestPic, LLC*, 898 F.3d 1161, 1168 (Fed. Cir. 2018) (“As many cases make clear, even if a process of collecting and analyzing information is ‘limited to particular content’ or a particular ‘source,’ that limitation does not make the collection and analysis other than abstract.” (quoting *Elec. Power Grp.*, 830 F.3d at 1353, 1355 (citing cases))). The Federal Circuit also held in *SmartGene*, where the claim did no more than call for a computing device with basic functionality, that comparing new and stored information and using rules to identify options is an abstract idea. *SmartGene, Inc. v. Advanced Biological Labs, S.A.*, 555 F. App’x 950, 955 (Fed. Cir. 2014).

Referencing the claim language, i.e., limitations (a), (b), and (c), as recited in claim 13, Appellant ostensibly maintains that claim 13 is not directed to an abstract idea because these features are “incapable of being performed solely in the mind and solely using pen and paper” (App. Br. 14-15; *see also* Reply Br. 9–10, 12–13). Appellant, thus, argues, for example, that “a human using pen and paper, or ‘by hand or merely thinking’ alone, without using any device,” is incapable of “detecting a flag, stored in a database, comprising coded indicia much less coded indicia indicating parcels of a single delivery” (App. Br. 15–16) and that the recited features, e.g., limitations (a), (b), and (c), as recited in claim 13, are not simply performable by human (*id.* at 16–18; *see also* Reply Br. 9–10).

To the extent Appellant maintains that claim 13 is patent-eligible because the claim recites the use of a computer, we note that a substantially similar argument was expressly rejected by the Court in *Alice*. *See Alice Corp.*, 573 U.S. at 223 (“the mere recitation of a generic computer cannot transform a patent-ineligible abstract idea into a patent-eligible invention”).

Although “a method that can be performed by human thought alone is merely an abstract idea and is not patent-eligible under § 101,” *CyberSource Corp. v. Retail Decisions, Inc.*, 654 F.3d 1366, 1373 (Fed. Cir. 2011), it does not logically follow that methods that arguably cannot be performed entirely in the human mind or manually, using pen and paper, are, therefore, not directed to abstract ideas.<sup>5</sup>

Having concluded that claim 13 recites a judicial exception, i.e., an abstract idea (Step 2A, Prong 1), we next consider whether the claim recites “additional elements that integrate the judicial exception into a practical application” (Step 2A, Prong 2).

The only additional elements recited in claim 13, beyond the abstract idea, are the claimed “at least one processor,” “at least one memory,” and “database.” But, as the Examiner observes (Final Act. 3, 6), these elements

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<sup>5</sup> Moreover, we are not convinced here there is no human analog for the invention. Although claim 13 recites that the method steps are performed by a processor, a human, e.g., a carrier employee, could determine that two packages are being shipped to the same address and then modify the service class so that the packages are delivered in a single delivery. Further, as the Examiner observes,

the term flag can be any type of indicator or marker, such as highlighting, marking, tagging, labeling, etc., that separates or distinguishes one item from others. A human can visually detect a “flag” or a flagged item on a shipping list/spreadsheet (database) without the need or use of a computer. The limitation “coded indicia” does not require or inherently imply the use or requirement of a computer. The coded indicia could be a tracking number, code, shipping code, or any form of identifier that can be visually observed by a human.

Ans. 7.

are described in the Specification at a high level of generality, i.e., as generic computer components (*see, e.g.*, Spec. ¶¶ 14–15).

Notably, the Specification does not suggest that these computer components are improved from a technical perspective, or that they operate differently than they ordinarily would. For example, we find no indication in the Specification, nor does Appellant direct us to any indication, that the operations recited in claim 13 require any specialized computer hardware or other inventive computer components, i.e., a particular machine, invoke any assertedly inventive programming, or that the claimed invention is implemented using other than generic computer components to perform generic computer functions. *See DDR Holdings, LLC v. Hotels.com, L.P.*, 773 F.3d 1245, 1256 (Fed. Cir. 2014) (“[A]fter *Alice*, there can remain no doubt: recitation of generic computer limitations does not make an otherwise ineligible claim patent-eligible.”).

We also find no indication in the Specification that the claimed invention effects a transformation or reduction of a particular article to a different state or thing. Nor do we find anything of record, short of attorney argument, that attributes an improvement in technology and/or a technical field to the claimed invention or that otherwise indicates that the claimed invention integrates the abstract idea into a “practical application,” as that phrase is used in the 2019 Revised Guidance.<sup>6</sup>

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<sup>6</sup> The Revised Guidance references MPEP §§ 2106.05(a)–(c) and (e)–(h) in describing the considerations that are indicative that an additional element or combination of elements integrates the judicial exception, e.g., the abstract idea, into a practical application. *Id.* at 55. If the recited judicial exception is integrated into a practical application, as determined under one or more of these MPEP sections, the claim is not “directed to” the judicial exception.

Appellant argues that the claims are directed to “technical improvements in the fields of geolocation detection of parcels in a route delivered by a delivery vehicle and database management environments” (*id.* at 19–20). And Appellant asserts that providing an efficient and reliable mechanism for an apparatus to perform “geolocation detection of parcels while being transported by a vehicle along a route and database management pertaining to detecting flags, within databases, with coded indicia regarding the parcels in the delivery by the vehicle” provides “improvements to a technical field, adds a specific limitation other than what is well-understood, routine and conventional in the field, provides a new and useful application in the physical realm, and provides meaningful recitations beyond generally linking the use of an abstract idea to a particular technological environment” (*id.* at 19–20).<sup>7</sup>

We, however, fail to see how, and Appellant does not explain how consolidating shipments for concurrent delivery, including detecting a flag, stored in a database, indicating that a first parcel and a second parcel are in a single delivery somehow constitutes an improvement in database management. As for Appellant’s contention that the claims are directed to technical improvements in the field of geolocation detection of parcels, claim 13 merely recites a result (i.e., “receiv[ing] an indication that a first parcel has been shipped for delivery, in a first shipping route, to a detected

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<sup>7</sup> We acknowledge that some of these considerations may properly be evaluated under step 2 of the *Mayo/Alice* framework (Step 2B of the 2019 Revised Guidance). Solely for the purpose of maintaining consistent treatment within the USPTO, we evaluate those considerations here under step 1 of the of the *Mayo/Alice* framework (Step 2A of the 2019 Revised Guidance).

location of the customer”), without any technical details for achieving that result. Appellant, by this argument, suggests such details exist, but those details are not reflected in the claim. For example, claim 13 does not specify *how to* determine that “a first parcel has been shipped for delivery in a first shipping route.” Instead, “the claim language here provides only a result-oriented solution with insufficient detail for how a computer accomplishes it. Our law demands more.” *Intellectual Ventures I LLC v. Capital One Fin. Corp.*, 850 F.3d 1332, 1342 (Fed. Cir. 2017).

We also do not agree with Appellant that there is any parallel between the present claims and the claims at issue in *BASCOM Global Internet Services, Inc. v. AT&T Mobility LLC*, 827 F.3d 1341 (Fed. Cir. 2016) (App. Br. 17–18; *see also* Reply Br. 8–9, 19–20). There, the Federal Circuit held that the second step of the *Mayo/Alice* framework was satisfied because the claimed invention “represents a ‘software-based invention[ ] that improve[s] the performance of the computer system itself.’” *BASCOM*, 827 F.3d at 1351 (stating that like *DDR Holdings*, where the patent “claimed a technical solution to a problem unique to the Internet,” the patent in *BASCOM* claimed a “technology-based solution . . . to filter content on the Internet that overcomes existing problems with other Internet filtering systems . . . making it more dynamic and efficient”) (citations omitted).

We are not persuaded that combining shipments to a common location to minimize the number of deliveries to that location is a technological improvement comparable to that in *BASCOM*, rather than an improvement to a business practice. And, to the extent that Appellant maintains that claims are patent-eligible because there is no risk of preemption (App. Br. 21), we note that preemption is not the sole test of patent-ineligibility. Although

“preemption may signal patent ineligible subject matter, the absence of complete preemption does not demonstrate patent eligibility.” *Ariosa Diagnostics, Inc. v. Sequenom, Inc.*, 788 F.3d 1371, 1379 (Fed. Cir. 2015).

Responding to the Examiner’s Answer in the Reply Brief, and citing *Enfish* and *McRO, Inc. v. Bandai Namco Games Am., Inc.*, 837 F.3d 1299 (Fed. Cir. 2016), Appellant asserts that the Federal Circuit has repeatedly held that software configurations that enable a computer to perform a function not previously performable by a computer are patent-eligible (Reply Br. 6). Appellant attempts to draw a parallel between the present claims and the claims in *Enfish* and *McRO*. We do not agree, however, that any such parallel exists.

Appellant argues that the present claims, like the claims in *McRO*, enable computing systems to perform functions not previously performable by a computer (*id.* (“Appellant respectfully submits that the present claims clearly enable computing systems to perform previously impossible tasks, and accordingly Appellant submits that the claims are directed to patentable subject matter.”)), and utilize limited rules in a process specifically designed to achieve an improved technological result (*id.* at 13–16). But, we are not persuaded that the present claims include “rules” that enable the computer to aggregate shipments for concurrent delivery in the same way the specific rules enabled the computer in *McRO* to generate the computer animated characters. We also find no evidence of record 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.



The ‘576 patent, at issue in *McRO*,<sup>8</sup> describes that prior to the claimed invention, character animation and lip synchronization were accomplished by human animators, with the assistance of a computer, and involved the use of a so-called “keyframe” approach in which animators set appropriate parameters, i.e., morph weights, at certain important times, i.e., “keyframes,” in order to produce accurate and realistic lip synchronization and facial expressions. *McRO*, 837 F.3d. at 1305. Animators knew what phoneme a character pronounced at a given time from a time-aligned phonetic transcription (a “timed transcript”). *Id.* In accordance with the prior technique, animators, using a computer, thus, manually determined the appropriate morph weight sets for each keyframe based on the phoneme timings in the timed transcript. *Id.*

In *McRO*, the improvement in computer animation was realized by using “rules, rather than artists [i.e., human animators], to set the morph weights and transitions between phonemes” (*id.* at 1313), i.e., in *McRO*, the invention used “rules to automatically set a keyframe at the correct point to depict more realistic speech, achieving results similar to those previously achieved manually by animators.” *Id.* at 1307. The rules in *McRO*, thus, allowed the computer to produce accurate and realistic synchronization in animated characters that could only previously be produced by humans.

We are not persuaded that any comparable situation is presented here. Indeed, it could not be clearer from the Specification that the present invention is intended to aggregate the delivery of multiple parcels intended for the same location into a minimum number of deliveries at that location in

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<sup>8</sup> U.S. Patent No. 6,307,576.

order to reduce the costs and inefficiencies associated with the delivery process (*see, e.g.*, Spec. ¶¶ 2–4, 11). Considered in light of the Specification, the claimed invention, thus, appears focused on addressing a business objective, i.e., “provid[ing] a customer-convenient, efficient and cost-effective means of combining a plurality of parcels intended for delivery at a specific location by a carrier into a minimum number of deliveries at that location” (*id.* ¶11), and not on any claimed means for accomplishing this goal that improves technology.

We also do not agree with Appellant that the present claims, like those at issue in *DDR Holdings*, are “specifically directed to concepts for solving a problem arising exclusively in a computer-network environment” (Reply Br. 17). Appellant asserts that the pending claims “explicitly recite features for determining whether *electronic* shipping data indicates that corresponding physical shipments are eligible for concurrent delivery”; that “the recited computing components are required to undertake an additional substantive analysis of the electronic shipment information for each of the plurality of shipments to determine whether various shipments are eligible for concurrent delivery” because the electronic shipping data does not necessarily indicate that shipments are originally scheduled for delivery on a common delivery date; and that “the various steps of the analysis must be configured to address the computational limitations of computing processors for undertaking fuzzy logic algorithms to establish possible matches between electronic shipment information records based on inexact informational matches” (*id.* at 17–18). Appellant, thus, maintains that the present claims, like those in *DDR Holdings*, “address computer-specific problems for automatically identifying electronic shipment data indicative of potential

concurrent delivery shipment candidates,” and are directed to patent-eligible subject matter under § 101 (*id.*).

In *DDR Holdings*, the Federal Circuit determined that, although the patent claims at issue involved conventional computers and the Internet, the claims addressed the problem of retaining website visitors who, if adhering to the routine, conventional functioning of Internet hyperlink protocol, would be transported instantly away from a host’s website after “clicking” on an advertisement and activating a hyperlink. *DDR Holdings*, 773 F.3d at 1257. The Federal Circuit, thus, held that the claims were directed to patent-eligible subject matter because they claim a solution “necessarily rooted in computer technology in order to overcome a problem specifically arising in the realm of computer networks,” and that the claimed invention did not simply use computers to serve a conventional business purpose. *Id.* Rather, there was a change to the routine, conventional functioning of Internet hyperlink protocol. *Id.*

We are not persuaded that determining whether various shipments are eligible for concurrent delivery is a problem particular to, or arising from, computer networks and/or the Internet. And, although Appellant argues that the claims “address computer-specific problems for automatically identifying electronic shipment data indicative of potential concurrent delivery shipment candidates,” we find nothing in the claim language regarding “automatically identifying electronic shipment data indicative of potential concurrent delivery shipment candidates”; claim 13, for example, merely recites “receiv[ing] an indication that a first parcel [having a known first delivery date] has been shipped for delivery, . . . to a detected location of the customer”; “receiv[ing] an indication that a second parcel [having a

known second delivery date that is different from the first delivery date] has been shipped for delivery . . . to the detected location of the customer”; and either expediting delivery of the second parcel when the second delivery date is after the first delivery date or delaying delivery of the second parcel by the carrier when the second delivery date is before the first delivery date.

We conclude that claim 13 recites a commercial interaction, i.e., an abstract idea, and that the additional elements recited in the claim are no more than generic computer components used as tools to perform the abstract idea of aggregating the delivery of parcels to a customer. As such, they do not integrate the recited abstract idea into a practical application. *See Alice Corp.*, 573 U.S. at 223–24 (“[W]holly generic computer implementation is not generally the sort of ‘additional feature[e]’ that provides any ‘practical assurance that the process is more than a drafting effort designed to monopolize the [abstract idea] itself.’”) (quoting *Mayo*, 566 U.S. at 77)). Accordingly, we agree with the Examiner that claim 13 is directed to an abstract idea.<sup>9</sup>

*Step Two of the Mayo/Alice Framework (2019 Revised Guidance, Step 2B)*

Having determined under step one of the *Mayo/Alice* framework that claim 13 is directed to an abstract idea, we next consider under Step 2B of the 2019 Revised Guidance, the second step of the *Mayo/Alice* framework, whether claim 13 adds specific limitations beyond the judicial exception that

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<sup>9</sup> Because we conclude that claim 13 reasonably may be characterized as directed to a commercial interaction, we need not determine whether claim 13 recites a process that can be performed in the human mind or by a human using pen and paper, and, therefore, may also be characterized reasonably as directed to a mental process, which is considered an abstract idea. *See* 2019 Revised Guidance, 84 Fed. Reg. at 52.

are not “well-understood, routine, conventional” in the field, or simply appends well-understood, routine, conventional activities previously known to the industry, specified at a high level of generality, to the judicial exception.

The Examiner determined here, and we agree, that the only claim elements beyond the abstract idea are the claimed processor, memory, and database, i.e., generic computer components used to perform generic computer functions (Final Act. 3, 6) — a determination amply supported by and fully consistent with the Specification (*see, e.g.*, Spec. ¶¶ 14–15).<sup>10</sup>

Appellant cannot reasonably contend, nor does Appellant, that there is a genuine issue of material fact regarding whether operation of the claimed processor is well-understood, routine, or conventional, where, as here, there is nothing in the Specification to indicate that the operations recited in claim 13 require any specialized hardware or inventive computer components or that the claimed invention is implemented using anything other than generic computer components to perform generic computer functions, e.g., receiving, storing, and processing information. Indeed, the Federal Circuit, in accordance with *Alice*, has “repeatedly recognized the

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<sup>10</sup> The Office’s April 19, 2018 Memorandum to the Examining Corps from Deputy Commissioner for Patent Examination Policy, Robert W. Bahr, entitled, Changes in Examination Procedure Pertaining to Subject Matter Eligibility, Recent Subject Matter Eligibility Decision (*Berkheimer v. HP, Inc.*),” available at <https://www.uspto.gov/sites/default/files/documents/memo-berkheimer-20180419.pdf>, expressly directs that an examiner may support the position that an additional element (or combination of elements) is not well-understood, routine or conventional with “[a] citation to an express statement in the specification . . . that demonstrates the well-understood, routine, conventional nature of the additional element(s)” (*id.* at 3).

absence of a genuine dispute as to eligibility” where claims have been defended as involving an inventive concept based “merely on the idea of using existing computers or the Internet to carry out conventional processes, with no alteration of computer functionality.” *Berkheimer v. HP, Inc.*, 890 F.3d 1369, 1373 (Fed. Cir. 2018) (Moore, J., concurring) (citations omitted); *see also BSG Tech. LLC v. BuySeasons, Inc.*, 899 F.3d 1281, 1291 (Fed. Cir. 2018) (“BSG Tech does not argue that other, non-abstract features of the claimed inventions, alone or in combination, are not well-understood, routine and conventional database structures and activities. Accordingly, the district court did not err in determining that the asserted claims lack an inventive concept.”).

We are not persuaded, on the present record, that the Examiner erred in rejecting claim 13 under 35 U.S.C. § 101. Therefore, we sustain the Examiner’s rejection of claim 13, and claims 14, 15, 66, 68, 70–76, 79, and 80, which fall with claim 13.

#### DECISION

The Examiner’s rejection of claims 13–15, 66, 68, 70–76, 79, and 80 under 35 U.S.C. § 101 is affirmed.

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

AFFIRMED