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BEFORE THE PATENT TRIAL AND APPEAL BOARD

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*Ex parte* ANTHONY BARBUSH, KENNETH BRADLEY GUBLER, and  
ROBERT J. GILLEN

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Appeal 2020-003248  
Application 14/556,972  
Technology Center 3600

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Before KARA L. SZPONDOWSKI, SCOTT B. HOWARD, and  
STEVEN M. AMUNDSON, *Administrative Patent Judges*.

SZPONDOWSKI, *Administrative Patent Judge*.

DECISION ON APPEAL

Appellant<sup>1</sup> appeals under 35 U.S.C. § 134(a) from the Examiner's Final Rejection of claims 1–20 and 22–29, which constitute all of the claims pending in this application. We have jurisdiction under 35 U.S.C. § 6(b).

We AFFIRM.

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<sup>1</sup> We use the word “Appellant” to refer to “applicant” as defined in 37 C.F.R. § 1.42. Appellant identifies the real party in interest as United Parcel Service of America, Inc. Appeal Br. 2.

## STATEMENT OF THE CASE

Appellant's invention relates to "methods, apparatus, systems, computing devices, computing entities, and/or the like for facilitating alternative delivery options." Spec. ¶2. Claim 1, reproduced below, is representative of the claimed subject matter:

1. A computer implemented method for performing delivery of an item to a dynamic delivery location that is different from an original delivery location, wherein delivery of the item to the dynamic delivery location is based on a dynamically updateable dispatch plan and a real time or near real time updated location information for the item, the method comprising the steps of:

receiving, by a computing system comprising a processor and a network interface configured to communicate via at least one network, shipment data identifying a delivery address for each item of a plurality of items, the plurality of items including the item;

electronically assigning, by the computing system, each of the plurality of items to a mobile asset based at least in part on the dynamically updateable dispatch plan for the mobile asset, wherein the dynamically updateable dispatch plan identifies a predetermined delivery route with a plurality of service stop locations for the mobile asset to perform in a particular time frame, wherein the plurality of service stop locations includes a consignee's delivery address of the item;

identifying, by the computing system, a candidate dynamic delivery location by comparing the plurality of service stop locations of the dynamically updateable dispatch plan to a stop criteria, wherein the candidate dynamic delivery location is different from the consignee's delivery address for the item;

identifying, by the computing system, prior to the item arriving at the candidate dynamic delivery location, a consignee of the item based on consignee selection criteria, the consignee selection criteria comprising (a) delivery preferences stored in a consignee profile and (b) at least one of (i) a distance between the candidate dynamic delivery location and one or more

delivery addresses stored in the consignee profile satisfying a distance threshold requirement or (ii) a time difference between a time of delivery at the candidate dynamic delivery location and a time of delivery at one of the one or more delivery addresses stored in the consignee profile satisfying a time threshold requirement, wherein the time difference is determined based on the dynamically updateable dispatch plan;

providing, by the computing system and via the network interface, a notification with real time or near real time location information for the item to a consignee computing device based at least in part on a triggering event, (a) while the mobile asset is en route providing a service according the dynamically updateable dispatch plan, (b) prior to the first item arriving at the candidate dynamic delivery location, and (c) in accordance with communication preferences stored in the consignee profile;

facilitating, by the computing system, verification of the consignee's identity upon successful delivery of the item to the consignee at the dynamic delivery location;

removing the consignee's delivery address of the item from the predetermined delivery route based on the dynamically updateable dispatch plan; and

automatically updating the dynamically updateable dispatch plan to provide an updated dynamically updateable dispatch plan while the mobile asset is en route.

## REJECTION

Claims 1–15 stand rejected under 35 U.S.C. § 112(b) as indefinite for failing to particularly point out and distinctly claim the subject matter which the inventor regards as the invention. Final Act. 6.

Claims 1–20 and 22–29 stand rejected under 35 U.S.C. § 101 as directed to patent-ineligible subject matter. Final Act. 6.

## ANALYSIS

### *Section 112 Rejection*

Appellant does not address the rejection under 35 U.S.C. § 112(b). *See generally* Appeal Br.; Reply Br.; Ans. 3. Accordingly, we summarily sustain the Examiner’s rejection of claims 1–15 under 35 U.S.C. § 112(b) as indefinite. *See* Manual of Patent Examining Procedure (MPEP) § 1205.02 (2018) (“If a ground of rejection stated by the examiner is not addressed in the appellant’s brief, appellant has waived any challenge to that ground of rejection and the Board may summarily sustain it.”); *Ex parte Frye*, 94 USPQ2d 1072, 1075 (BPAI 2010) (precedential) (“If an appellant fails to present arguments on a particular issue – or more broadly, on a particular rejection – the Board will not, as a general matter, unilaterally review those uncontested aspects of the rejection.”).

### *Section 101 Rejection*

An invention is patent eligible if it claims a “new and useful process, machine, manufacture, or composition of matter.” 35 U.S.C. § 101. However, the Supreme Court has long interpreted 35 U.S.C. § 101 to include implicit exceptions: “[l]aws of nature, natural phenomena, and abstract ideas” are not patentable. *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 Supreme Court’s two-step 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 at 611); mathematical formulas (*Parker v. Flook*, 437 U.S. 584, 594–95 (1978)); and mental processes (*Gottschalk v. Benson*, 409 U.S. 63, 69 (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 water-proof cloth, vulcanizing India rubber, smelting ores” (*id.* at 182 n.7 (quoting *Corning v. Burden*, 56 U.S. 252, 267–68 (1854))); and manufacturing flour (*Benson*, 409 U.S. at 69 (citing *Cochrane v. Deener*, 94 U.S. 780, 785 (1876))).

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 (internal 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.* (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.*

The PTO has published guidance on the application of § 101. USPTO’s January 7, 2019 Memorandum, 2019 Revised Patent Subject Matter Eligibility Guidance, 84 Fed. Reg. 50 (Jan. 7, 2019) (“2019 Guidance”); October 2019 Update: Subject Matter Eligibility, 84 Fed. Reg. 55,942 (available at the USPTO’s website) (“October 2019 PEG Update”). Under the 2019 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); 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)).

*See* 2019 Guidance, 84 Fed. Reg. at 52, 55–56. 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.

*See id.* at 56.

#### 2019 Guidance, Step 2A, Prong 1

Under the first step of the *Alice/Mayo* framework, the Examiner finds that the claimed invention is directed to “commercial interaction and

managing personal behavior or relationships or interactions between people (following rules or instructions),” which are certain methods of organizing human activity. Final Act. 9. Specifically, the Examiner finds that the claimed invention is directed to “delivering an item to a dynamic delivery location based on a dynamically updatable dispatch plan,” which is “*following rules or instructions.*” Ans. 4. The Examiner also finds that the claimed invention gives customers “additional flexibility in receiving an item by facilitating alternative delivery options for the customers,” which is directed towards “commercial interactions” and “*managing personal behavior or relationships or interactions between people.*” *Id.* at 5.

Appellant does not persuasively rebut the Examiner’s determination that the claims are directed to certain methods for organizing human activity under Step 2A, Prong 1. Appellant argues that the claims “do not recite hedging, creation of insurance, risk mitigation, contract formation, formation of legal obligations, marketing, or any of the other examples of commercial interactions; or social activities, teaching, following rules or instructions, or any other examples of managing personal behavior or relationships or interactions between people.” Appeal Br. 10–11; *see* Appeal Br. 16; Reply Br. 3–4, 8.

We agree with the Examiner’s determination that the claims recite certain methods of organizing human activity. *See* Final Act. 9; Ans. 4–5; 84 Fed. Reg. at 52. Appellant’s Specification describes the problem that “[s]hipping customers . . . cannot receive items on their first delivery attempt” because they are “away from their preferred delivery address during normal business hours.” Spec. ¶ 1. According to the Specification, there is a need “to give customers additional flexibility in receiving an item.”

*Id.* To solve this problem, the Specification describes “facilitating alternative delivery options for customers” by enabling “a consignee [to] meet a driver and receive an item at a location different from the delivery address associated with the item.” *Id.* ¶ 13. Claim 1 recites a method that performs the following steps:

*receiving*, by a computing system comprising a processor and a network interface configured to communicate via at least one network, *shipment data identifying a delivery address for each item of a plurality of items, the plurality of items including the item;*

*electronically assigning*, by the computing system, *each of the plurality of items to a mobile asset based at least in part on the dynamically updateable dispatch plan for the mobile asset, wherein the dynamically updateable dispatch plan identifies a predetermined delivery route with a plurality of service stop locations for the mobile asset to perform in a particular time frame, wherein the plurality of service stop locations includes a consignee’s delivery address of the item;*

*identifying*, by the computing system, *a candidate dynamic delivery location by comparing the plurality of service stop locations of the dynamically updateable dispatch plan to a stop criteria, wherein the candidate dynamic delivery location is different from the consignee’s delivery address for the item;*

*identifying*, by the computing system, *prior to the item arriving at the candidate dynamic delivery location, a consignee of the item based on consignee selection criteria, the consignee selection criteria comprising (a) delivery preferences stored in a consignee profile and (b) at least one of (i) a distance between the candidate dynamic delivery location and one or more delivery addresses stored in the consignee profile satisfying a distance threshold requirement or (ii) a time difference between a time of delivery at the candidate dynamic delivery location and a time of delivery at one of the one or more delivery addresses stored in the consignee profile satisfying a time threshold*

*requirement, wherein the time difference is determined based on the dynamically updateable dispatch plan;*

*providing, by the computing system and via the network interface, a notification with real time or near real time location information for the item to a consignee computing device based at least in part on a triggering event, (a) while the mobile asset is en route providing a service according the dynamically updateable dispatch plan, (b) prior to the first item arriving at the candidate dynamic delivery location, and (c) in accordance with communication preferences stored in the consignee profile;*

*facilitating, by the computing system, verification of the consignee's identity upon successful delivery of the item to the consignee at the dynamic delivery location;*

*removing the consignee's delivery address of the item from the predetermined delivery route based on the dynamically updateable dispatch plan; and*

*automatically updating the dynamically updateable dispatch plan to provide an updated dynamically updateable dispatch plan while the mobile asset is en route.*

Appeal Br. 19–20 (Claims App.) (emphasis added).

Appellant has not persuasively argued why the italicized claim limitations above do not recite “certain methods of organizing human activity”—specifically, “commercial or legal interactions (including agreements in the form of contracts . . . business relations)” and “managing personal behavior or relationships or interactions between people (including . . . following rules or instructions).” *See* 2019 Guidance, 84 Fed. Reg. at 52. For example, the Specification describes that “a consignee may meet a driver and receive an item at a location different from the delivery address associated with the item.” Spec. ¶ 13. The Specification further describes the “carrier (e.g., via a computing device, telephone, and the like), [or] the driver (e.g., via a computing device, telephone, and the like) . . . may

communicate with the consignee to arrange a mutually acceptable time and location (e.g., dynamic delivery location) to accomplish the delivery.” *Id.* Based upon this disclosure, we agree with the Examiner that the claims recite certain methods of organizing human activity, and more particularly, (1) managing interactions between a carrier and a consignee (recipient), and (2) commercial interactions (between a carrier and a recipient).

Accordingly, we conclude claim 1 recites certain methods of organizing human activity as identified in the 2019 Guidance, and thus an abstract idea.

2019 Guidance, Step 2A, Prong 2

In determining whether the claims are “directed to” the identified abstract idea, we next consider whether the claims recite additional elements that integrate the judicial exception into a practical application. For the reasons set forth below, we discern no additional element (or combination of elements) recited in the claims that integrate the judicial exception into a practical application. *See* 2019 Guidance, 84 Fed. Reg. at 54–55.

Appellant argues that the claimed steps “recite a practical application that enable[s] enhanced logistic network intelligence, reliability, and functionality” and amount to more than applying the abstract idea using generic computer components. Appeal Br. 12–13.

We are not persuaded by Appellant’s arguments and agree with the Examiner’s findings and conclusions. *See* Final Act. 9–10; Ans. 7–11. We agree with the Examiner’s conclusion that the “judicial exception is not integrated into a practical application because” the claims “as a whole merely describe how to generally ‘apply’ the concept of receiving, assigning, identifying, providing, facilitating, removing, and updating

information in a computer environment.” Final Act. 10; *see also* Ans. 9–10. As the Examiner properly reasons, the claimed “use of a ‘computer network’ to achieve successful delivery of an item merely invokes the computer network as a tool to perform the abstract idea.” Ans. 12.

Here, the claimed invention uses generic computer components to collect, analyze, and display data (i.e., the steps are carried out by “a computing system comprising a processor and a network interface configured to communicate via at least one network”). *See, e.g.*, Spec. ¶¶ 20–25; *SAP Am., Inc. v. InvestPic, LLC*, 898 F.3d 1161, 1167–68 (Fed. Cir. 2018). The Specification supports that the steps are performed by generic computer components performing generic computer functions. For example, the Specification describes that the “term ‘system’ may refer to, for example, one or more computers, computing entities, computing devices, mobile phones . . . and/or any combination of devices or entities adapted to perform the functions, operations, and/or processes described here.” Spec. ¶ 20. These “functions, operations, and/or processes may include, for example, transmitting, receiving, operating on, processing, displaying, storing, determining, creating/generating, monitoring, evaluating, comparing, and/or similar terms used herein interchangeably.” *Id.* Therefore, the claimed computer components used to perform the limitations in the claims, such as the “computer system,” are generic computer components. Simply implementing an abstract idea using conventional machines or devices adds nothing of substance. *See Alice*, 573 U.S. at 223 (“Stating an abstract idea ‘while adding the words ‘apply it’ is not enough for patent eligibility.”); *Mayo*, 566 U.S. at 84–85 (explaining that “simply

implementing a mathematical principle on a physical machine” does not suffice for patent eligibility (citing *Gottschalk*, 409 U.S. at 64–65, 71).

Appellant further argues that the “claimed invention provides a solution for increasing the number accomplished deliveries by improving the function of the logistics network by accurately identifying, in real time, alternative delivery locations and eligible consignees, while the mobile asset is en route and operating according to a dynamically updatable dispatch plan.” Appeal Br. 13; *see also* Appeal Br. 14. In support of its arguments, Appellant cites to paragraphs 2 and 14 of the Specification. *Id.* Appellant argues that the “claims provide an improvement to the logistics technology by identifying alternate delivery options in real time, thereby effectively reducing the instances of failed delivery attempts.” Reply Br. 5. Appellant also argues that the “claims include a practical application based receiving how/when a parcel is delivered as it moves through a transportation network.” *Id.* at 7.

We are not persuaded by Appellant’s arguments and agree with the Examiner’s findings and conclusions. *See* Final Act. 9–10; Ans. 12. Appellant has not sufficiently shown that the claims are directed to an improvement to the computer system or technological process. Rather, we agree with the Examiner’s conclusion that nothing in the “claims or specification recites an improvement in the functioning of a computer, or an improvement to other technology or technical field.” Ans. 12 (emphasis omitted). Specifically, the Examiner finds that the improvement claimed is similar to the claimed improvement in *Trading Technologies*. *Id.* (citing *Trading Techs. Int’l, Inc. v. IBG LLC*, 921 F.3d 1084 (Fed. Cir. 2019)).

In *Trading Technologies*, the Federal Circuit found that the “purported improvements” towards “speed, accuracy, and usability compared to prior art GUI tools” were “not technological.” 921 F.3d at 1091. There, the Specification described “that the invention ‘provide[d] the trader with improved efficiency and versatility in placing, and thus executing, trade orders for commodities in an electronic exchange.’” *Id.* The court found that this “improv[ed] the trader, not the functioning of the computer.” *Id.* As such, the court concluded that the claimed invention “did not solve a technical problem with a technical solution.” *Id.*

Here, the Specification describes that the invention improves delivery of items by providing alternate delivery options and reducing the instances of failed delivery attempts. *See* Spec. ¶ 13; Appeal Br. 14; Reply Br. 5–7. We agree with the Examiner’s conclusion that the alleged improvement is “in the *business process* of rerouting packages (i.e., abstract idea of a certain method of organizing human activity), which is *not an improvement in technology.*” Furthermore, Appellant has not shown that the alleged improvement to making deliveries changes the manner in which the computer operates or changes the functionality of the computer itself. Instead, Appellant’s identified alleged improvement is directed to the abstract idea.

Accordingly, for the foregoing reasons, the claims fail to integrate the abstract idea into a practical application.

#### 2019 Guidance, Step 2B

Turning to step 2 of the *Alice/Mayo* framework, we look to whether the claims (a) add a specific limitation or combination of limitations that are not well-understood, routine, conventional activity in the field, or (b) simply

append well-understood, routine, conventional activities previously known to the industry, specified at a high level of generality, to the judicial exception. 2019 Guidance, 84 Fed. Reg. at 56.

We agree with the Examiner that the additional elements claimed (i.e., “a computing system comprising a processor and a network interface configured to communicate via at least one network”) are “generic computer components.” Final Act. 9; *see* Final Act. 10. As discussed above, the Specification describes the claimed computer components generically and evidences their conventional nature. *See, e.g.*, Spec. ¶¶ 20–25. For example, the Specification explains that the “term ‘system’ may refer to, for example, one or more computers, computing entities, computing devices, mobile phones . . . and/or any combination of devices or entities adapted to perform the functions, operations, and/or processes described here.” Spec. ¶ 20. Appellant does not direct our attention to anything in the Specification that indicates the claimed computer components perform anything other than the well-understood, routine, and conventional functions of transmitting, manipulating, and analyzing data. *See, e.g., Elec. Power Grp., LLC v. Alstom S.A.*, 830 F.3d 1350, 1355 (Fed. Cir. 2016) (“Nothing in the claims, understood in light of the specification, requires anything other than off-the-shelf, conventional computer, network, and display technology for gathering, sending, and presenting the desired information.”); *Alice*, 573 U.S. at 225–26 (receiving, storing, sending information over networks insufficient to add an inventive concept).

When viewed as a whole, nothing in the claims adds significantly more (i.e., an inventive concept) to the abstract idea. The claimed “computing system comprising a processor and a network interface

configured to communicate via at least one network” amounts to no more than mere instructions to apply the abstract idea using generic computer components, which is insufficient to provide an inventive concept.

Furthermore, we are unable discern anything in the claims, even when the recitations are considered in combination, that represents something more than the performance of routine, conventional functions of a generic computer. That is, the claims at issue do not require any nonconventional computer components, or even a “non-conventional and non-generic arrangement of known, conventional pieces,” but merely call for performance of the method “on a set of generic computer components.” *Bascom Glob. Internet Servs., Inc. v. AT&T Mobility LLC*, 827 F.3d 1341, 1350 (Fed. Cir. 2016).

Given the claimed generic computer components performing generic computer functions, we conclude that the combination of limitations in each independent claim does not supply an “inventive concept” that renders the claim “significantly more” than an abstract idea. Thus, the claims do not satisfy § 101 under *Mayo/Alice* step two.

For at least the above reasons, we sustain the Examiner’s rejection of independent claims 1 and 16 as being directed to patent-ineligible subject matter, as well as dependent claims 2–15, 17–20, and 22–29, which were not separately argued.

#### CONCLUSION

We affirm the Examiner’s rejection of claims 1–15 under 35 U.S.C. § 112(b).

We affirm the Examiner’s rejection of claims 1–20 and 22–29 under 35 U.S.C. § 101.

In summary:

<b>Claims Rejected</b>	<b>35 U.S.C. §</b>	<b>Basis</b>	<b>Affirmed</b>	<b>Reversed</b>
1–15	112	Indefiniteness	1–15	
1–20, 22–29	101	Eligibility	1–20, 22–29	
<b>Overall Outcome</b>			1–20, 22–29	

TIME PERIOD FOR 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