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UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

Ex parte CHRIS DECK

Appeal 2018-008900
Application 13/788,261
Technology Center 3600

Before BRADLEY W. BAUMEISTER, KARA L. SZPONDOWSKI, and RUSSELL E. CASS, *Administrative Patent Judges*.

SZPONDOWSKI, *Administrative Patent Judge*.

DECISION ON APPEAL

Pursuant to 35 U.S.C. § 134(a), Appellant[1] appeals from the Examiner's decision to reject claims 1–7 and 9–14, constituting all the claims pending in the application. We have jurisdiction under 35 U.S.C. § 6(b).

We AFFIRM.

[1] We use the word "Appellant" to refer to "applicant" as defined in 37 C.F.R. § 1.42. Appellant identifies the real party in interest as R+L Carriers, Inc. Appeal Brief filed Oct. 2, 2017 ("Appeal Br.") 2.

STATEMENT OF THE CASE

Appellant's invention generally relates to facilitating movement of articles of freight and determining whether the movement of an article is consistent with one or more shipping rules. Spec. ¶ 2. Claims 1 and 9, reproduced below, are representative of the claimed subject matter:

> 1. A method for determining whether to move an article disposed at a first location, the method comprising:
>
> reading an article marker comprising article data identifying the article disposed at the first location, wherein when reading the article marker, the first location is located at a warehouse or a distribution center;
>
> transmitting article data to a computing device, wherein the computing device is in electrical communication with a database comprising a plurality of shipping rules related to the article;
>
> using the computing device to associate the article, based at least in part on the article data, with one or more of the plurality of shipping rules in the database;
>
> reading a location marker comprising location data identifying a second location, wherein when reading the location marker, the second location is located at the warehouse or the distribution center;
>
> transmitting the location data to the computing device;
>
> using the computing device to determine whether to move the article from the first location to the second location, based at least in part on at least one of the shipping rules with which the article is associated and the location data;
>
> transmitting a message from the computing device to an annunciator, wherein the message indicates a determination of whether to move the article from the first location to the second location;
>
> eliminating at least one of the one or more of the plurality of shipping rules with which the article is associated based on

the first location such that a subset of the plurality of shipping rules with which the article is associated remain associated with the article; and

setting a state of the annunciator, based on the message.

9. A method for determining whether to move an article disposed at a first location, the method comprising:

reading an article marker comprising article data identifying the article disposed at the first location, wherein when reading the article marker, the first location is located at a warehouse or a distribution center;

transmitting article data to a computing device, wherein:

the computing device is in electrical communication with a database comprising a plurality of shipping rules related to the article;

the plurality of shipping rules comprise at least a first shipping rule and a second shipping rule;

the first shipping rule comprises a first priority level and the second shipping rule comprises a second priority level; and

the first priority level supersedes the second priority level such that when the first priority rule and the second priority rule conflict, the first shipping rule is implemented and the second shipping rule is not implemented;

using the computing device to associate the article, based at least in part on the article data, with one or more of the plurality of shipping rules in the database;

reading a location marker comprising location data identifying a second location, wherein when reading the location marker, the second location is located at the warehouse or the distribution center;

transmitting the location data to the computing device;

using the computing device to determine whether to move the article from the first location to the second location,

based at least in part on at least one of the shipping rules with which the article is associated and the location data;

transmitting a message from the computing device to an annunciator, wherein the message indicates a determination of whether to move the article from the first location to the second location; and

setting a state of the annunciator, based on the message.

REJECTIONS

Claims 1–7 and 9–14 stand rejected under 35 U.S.C. § 101 as directed to patent ineligible subject matter.

Claims 1–4, and 9–12 are rejected under pre-AIA 35 U.S.C. § 103(a) as being unpatentable over the combination of Kodger, Jr. (US 7,684,994 B2; issued Mar. 23, 2010) ("Kodger") and Shakes et al. (US 7,331,471 B1; issued Feb. 19, 2008) ("Shakes").

Claims 7 and 14 stand rejected under pre-AIA 35 U.S.C. § 103(a) as being unpatentable over the combination of Kodger, Shakes, and Ghazarian (US 2002/0089434 A1; published July 11, 2002).

Claims 5 and 13 stand rejected under pre-AIA 35 U.S.C. § 103(a) as being unpatentable over the combination of Kodger, Shakes, and Rojas et al. (US 2006/0210073 A1; published Sept. 21, 2006) ("Rojas").

Claim 6 stand rejected under pre-AIA 35 U.S.C. § 103(a) as being unpatentable over the combination of Kodger, Shakes, and Moir et al. (US 2012/0179621 A1; published July 12, 2012) ("Moir").

ANALYSIS

35 U.S.C. § 101 Rejections

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 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, 69 (1972)).

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 (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.* (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 revised guidance on the application of § 101. 2019 Revised Patent Subject Matter Eligibility Guidance, 84 Fed. Reg. 50 (January 7, 2019) ("2019 Guidance"); October 2019 Update: Subject Matter Eligibility, 84 Fed. Reg. 55,942 (Oct. 18, 2019) (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)).

2019 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 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 2019 Guidance, 84 Fed. Reg. at 56–57.

2019 Guidance, Step 2A, Prong 1

The Examiner determines claim 1 "is directed towards a series of steps of reading an article marker, transmitting article data, associating the article with shipping rules, reading a location marker, transmitting location data, determining whether to move an article, transmitting a message indicating whether to move the article, changing shipping rules, and setting a state of a device," which is directed to the abstract idea of "collecting item and location information, analyzing it with shipping rules, outputting a response to a device to move the item to a new location, and updating rules based on the collected information," similar to concepts the Federal Circuit identified as abstract ideas in *Electric Power Group, LLC v. Alstom*, 830 F.3d 1350 (Fed. Cir. 2016) (collecting information, analyzing it, and displaying results) and *Intellectual Ventures I LLC v. Capital One Financial Corp.*, 850 F.3d 1332 (Fed. Cir. 2017) (collecting, displaying, and manipulating data). Final Act. 10; *see also* Ans. 4–5 (also citing *Automated Tracking Solutions, LLC v. Coca-Cola Company*, 723 Fed.Appx. 989 (Fed. Cir. 2018)). Final Action mailed May 2, 2017 ("Final Act.") 10–11. The Examiner makes similar determinations with respect to independent claim 9. *Id.* at 11–13.

Appellant contends the claims are not directed to an abstract idea, but "instead are directed to specific computer-implemented methods of determining whether to move the article from the first location to the second location based at least in part on shipping rules, transmitting a message to an annunciator, and eliminating at least one shipping rule with which the article is associated based on the first location," which "are distinct from the types of concepts typically found as abstract." Appeal Br. 16–17.

Appellant has not persuasively rebutted the Examiner's findings and conclusions. A claim recites a mental process when the claim encompasses acts people can perform using their minds or pen and paper. *See, e.g.*, *CyberSource Corp. v. Retail Decisions, Inc.*, 654 F.3d 1366, 1372–73 (Fed. Cir. 2011) (determining that a claim whose "steps can be performed in the human mind, or by a human using a pen and paper" is directed to an unpatentable mental process). This is true even if the claim recites that a generic computer component performs the acts. *See, e.g.*, *Versata Dev. Grp., Inc. v. SAP Am., Inc.*, 793 F.3d 1306, 1335 (Fed. Cir. 2015) ("Courts have examined claims that required the use of a computer and still found that the underlying, patent-ineligible invention could be performed via pen and paper or in a person's mind."); *see also Intellectual Ventures I LLC v. Symantec Corp.*, 838 F.3d 1307, 1318 (Fed. Cir. 2016) ("*Symantec*") ("[W]ith the exception of generic computer-implemented steps, there is nothing in the claims themselves that foreclose them from being performed by a human, mentally or with pen and paper."); 2019 Guidance, 84 Fed. Reg. at 52 n.14 ("If a claim, under its broadest reasonable interpretation, covers performance in the mind but for the recitation of generic computer components, then it is still in the mental processes category unless the claim cannot practically be performed in the mind."). The 2019 Guidance recognizes mental observations, evaluations and judgments as constituting patent-ineligible abstract ideas. *See id.* at 52.

Appellant's Specification describes "a need . . . for a freight carrier to facilitate movement of articles in freight and determine in real time whether movement of the article from one location to another location is consistent with a set of shipping rules related to that article." Spec. ¶ 5. Appellant

further discloses that a "visible, audible, or tactile annunciator may notify an operator whether the movement is consistent or not consistent and may assist the freight carrier in reducing errors." Spec. ¶ 5.

Claim 1 recites: (1) "reading an article marker comprising article data identifying the article disposed at the first location, wherein when reading the article marker, the first location is located at a warehouse or a distribution center"; (2) "transmitting article data . . ."; (3) ". . . associat[ing] the article, based at least in part on the article data, with one or more of the plurality of shipping rules . . ."; (4) "reading a location marker comprising location data identifying a second location, wherein when reading the location marker, the second location is located at the warehouse or the distribution center"; (5) "transmitting the location data . . .";
(6) "determin[ing] whether to move the article from the first location to the second location, based at least in part on at least one of the shipping rules with which the article is associated and the location data"; (7) "transmitting a message . . . wherein the message indicates a determination of whether to move the article from the first location to the second location";
(8) "eliminating at least one of the one or more of the plurality of shipping rules with which the article is associated based on the first location such that a subset of the plurality of shipping rules with which the article is associated remain associated with the article;" and (9) "setting a state of an annunciator, based on the message." Claim 9 recites similar limitations. *See* Appeal Br. 34–35 (Claims Appendix).

Each of the steps recited above can be practically performed by a human being and, therefore, recites a mental process under the 2019 Guidance.

Appellant's Specification supports our findings. Appellant describes the "article marker" and "location marker" broadly. *See* Spec. ¶ 19. For example, Appellant describes that the "article marker" and "location marker" as including "*serial numbers*, *hand-written markers*, bar codes, radio frequency identification (RFID) devices, and inductive identifiers." Spec. ¶ 19 (emphasis added). Appellant explains that these markers may be a "string of alpha-numeric characters" that "may be printed (*so as to be seen by a user, e.g., on a label*), may be encoded in a bar code, or may be electronically stored in an RFID device or inductive identifier." *Id*. (emphasis added). Appellant further states that article and location markers may be "a visual label which can simply be read by a human . . . [and] the data from the marker may be manually entered into the reader." Spec. ¶ 23; *see also id.* ¶ 25 ("the reading of the markers . . . may also be manually performed"). As another example, Appellant states that "a person may visually inspect the marker, contact an operator by phone, and pass the marker data to the operator who enters it into the computing device." *Id.* ¶ 23. Thus, limitations (1), (2), (4), and (5) may be practically performed by a human being. Limitations (3), (6), and (8) involve analyzing the article or location marker with respect to one or more shipping rules, and limitations (7) and (9) involve taking some action based upon the result of that analysis, which, likewise may be practically performed by a human being.

We agree with the Examiner that the claims here are similar to concepts the Federal Circuit found abstract in *Electric Power Group* and *Intellectual Ventures I. See also Automated Tracking*, 723 Fed.Appx. at 993 (claims directed to systems "for locating, identifying and/or tracking of" an object using RFID components found abstract, as they achieve the result "by

collecting data from sensors, analyzing that data, and determining results based on the analysis of data").

Accordingly, Appellant has not sufficiently established that the claims do not recite an abstract idea, and we agree with the Examiner's findings and conclusions. *See* Final Act. 10; Examiner's Answer mailed July 19, 2018 ("Ans.") 3–9. Therefore, we conclude the claims recite a mental process pursuant to Step 2A, Prong One, of the guidance. *See* 2019 Guidance, 84 Fed. Reg. at 54 (Section III(A)(1) ("Prong One: Evaluate Whether the Claim Recites a Judicial Exception")).

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.[2] We discern no additional element (or combination of elements) recited in the claims that integrates the judicial exception into a practical application. *See* 2019 Guidance, 84 Fed. Reg. at 54–55.

The Examiner determines the claims recite generic computer elements recited at a high level of generality that merely act as a means to receive, store, transmit, and output data. Final Act. 11.

Appellant contends the claimed methods "are inextricably tied to computer technology and distinct from the types of concepts typically found

[2] We acknowledge that some of the considerations at Step 2A, Prong Two, properly may be evaluated under Step 2 of *Alice* (Step 2B of the Office Guidance). For purposes of maintaining consistent treatment within the Office, we evaluate them under Step 1 of *Alice* (Step 2A of the Office guidance). *See* 2019 Guidance, 84 Fed. Reg. at 55 n.25, & 27–32.

as abstract." Appeal Br. 17. Appellant further argues the claims are similar to those in *McRO, Inc. v. Bandai Namco Games America, Inc.*, 837 F.3d 1299 (2016) and *Enfish, LLC v. Microsoft Corp.*, 822 F.3d 1327 (Fed. Cir. 2016). Appeal Br. 17–18, 24–25.

Specifically, Appellant argues the claims "are limited to a specific process for determining whether to move an article from the first location to the second location based at least in part on shipping rules and use 'particular information and techniques and [do] not preempt approaches that use rules of a different structure or different techniques.'" Appeal Br. 18; *see also id.* at. 19. Appellant contends that the claims are designed to "improve the movement of an article during shipping by proactively determining whether movement of the article from one location to another is consistent with one or more shipping rules to proactively prevent the article from being shipped to the wrong location or with the wrong accompanying freight." *Id.* at 18 (citing Spec. ¶¶ 3–5); *see also id.* at 24–25 (citing Spec. ¶¶ 3–5, 49). Appellant argues that "the claimed process provides a specific technological improvement over existing techniques in the field." *Id.* at 18 (citing Spec. ¶ 49); *see also id*. at 23.

We are not persuaded by Appellant's arguments and agree with the Examiner's determinations. *See* Final Act. 2–9, 10–12; Ans. 3–9. As additional elements, claims 1 and 9 recite "a computing device," "a database comprising a plurality of shipping rules related to the article," that "the computing device is in electrical communication with [the] database," and "an annunciator."

Appellant's Specification describes these additional limitations generically. *See*, *e.g.*, Spec. ¶ 26 ("communication link 32 may be a

wireless network, wired network, or a combination thereof"); *id.* ¶ 27 ("computing device 30 may comprise a personal computer, a server, a dedicated machine, or other suitable device"); *id.* ("database 34 may be an enterprise database management system or 'cloud' hosted system"); *id.* ¶ 35 ("annunciator 28 may comprise visual (e.g., lights), audio (e.g., sirens, buzzers), or tactile (e.g., vibration) devices or combinations thereof"). We, therefore, agree with the Examiner that these additional limitations recite generic computer components performing generic computer functions. *See* Final Act. 5–9, 11; Ans. 3–8.

We find insufficient indication in the Specification, nor does Appellant direct us to any, that the operations recited by the claims invoke any inventive programming, require any specialized computer hardware or other inventive computer components (i.e., a particular machine), or that the claimed invention is implemented using other than generic computer components to perform generic computer functions (e.g., receive, analyze, transmit, and output data). *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."). The claims merely add generic computer components to support the abstract idea, which is insufficient to integrate the judicial exception into a practical application.

Moreover, we are unpersuaded the claims constitute an improvement to the functioning of the computer or to any other technology or technical field; they merely adapt the abstract idea to an execution of steps performed on a computer. *See Credit Acceptance Corp. v. Westlake Services*, 859 F.3d 1044, 1055 (Fed. Cir. 2017) ("Our prior cases have made clear that mere

automation of manual processes using generic computers does not constitute a patentable improvement in computer technology.").

The problem described in Appellant's Specification pertains to "determining and indicating whether movement of an article is consistent with one or more shipping rules," which is a business problem or matter of mental judgment, not a technical one. Spec. ¶ 2; *see also id*. ¶¶ 3–5. We agree with the Examiner that the claims are directed to a business improvement to solve the described business problem, rather than a technical improvement, an improvement to computer functionality, or an improvement to another technology or technical field.. *See* Ans. 5–8.

We disagree that the claims are similar to those in *McRO* and *Enfish*. In *McRO*, the patent described computer software for matching audio to a 3D animated mouth movement to provide lip-synched animation. 837 F.3d at 1306–1307. Moreover, the claims in *McRO* recited (i) specific limitations requiring a set of rules that "define[] a morph weight set stream as a function of phoneme sequence and times associated with said phoneme sequence" to enable computers to produce "accurate and realistic lip synchronization and facial expressions in animated characters" (*id.* at 1313) and, when viewed as a whole, were directed to (ii) a "technological improvement over the existing, manual 3-D animation techniques" that use "limited rules in a process specifically designed to achieve an improved technological result in conventional industry practice." *Id.* at 1316. Similarly, the claimed data storage and retrieval method in *Enfish* recited a "self-referential table [for a computer database, which] is a specific type of data structure designed to improve the way a computer stores and retrieves data in memory." *Enfish*, 822 F.3d at 1336, 1339.

Here, Appellant has not identified any analogous technological improvement that is attributable to the claimed invention; rather, Appellant merely argues that the technological process is improved "by proactively preventing shipping errors." *See* Appeal Br. 18–19. We are not persuaded that improving a process for movement of an article, using steps that (as discussed above) can be performed primarily by a human, reflects a technological improvement analogous to improved 3-D animation techniques at issue in *McRO* or an improvement to computer functionality as in *Enfish*. Instead, Appellant's claims focus on improving the process for moving an article by reducing errors in the process through the use of rules that can be carried out by a human. Put simply, the claim focuses on improving the abstract idea itself.

Appellant's preemption argument is likewise unpersuasive of Examiner error. *See* Appeal Br. 19–20. Although preemption "might tend to impede innovation more than it would tend to promote it, 'thereby thwarting the primary object of the patent laws,'" *Alice*, 573 U.S. at 216 (citing *Mayo*, 566 U.S. at 70–71), "the absence of complete preemption does not demonstrate patent eligibility" *Ariosa Diagnostics, Inc. v. Sequenom, Inc.*, 788 F.3d 1371, 1379 (Fed. Cir. 2015). *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."); Ans. 8–9.

Accordingly, we determine that the claims do not integrate the judicial exception into a practical application. *See* 2019 Guidance at 54 ("Section III(A)(2) (Prong Two: If the Claim Recites a Judicial Exception, Evaluate

Whether the Judicial Exception Is Integrated Into a Practical Application"). We, therefore, agree with the Examiner that the claims are directed to a judicial exception. *See* Final Act. 2–12; Ans. 10–16.

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.

The Examiner determines that the generic computer elements (e.g., the computing device and annunciator) merely perform the conventional, routine, and well-known functions of receiving, storing, transmitting, and outputting data, and, therefore, do not add significantly more to the abstract idea. Final Act. 11. The Examiner further determines that the claims are directed to well-understood, routine, and conventional activities, e.g., moving an article from a first location to a second location based on shipping rules, removing rules that are not relevant, and changing a computer state based on input. Final Act. 9; Ans. 10–11.

Appellant argues that "independent claims 1 and 9 add specific limitations to what is well-understood, routine and conventional in the field, and add unconventional steps that confine the claims to a particular useful application." Appeal Br. 21. Appellant identifies "determining whether to move the article from the first location to the second location, based at least in part on at least one of the shipping rules with which the article is

associated and the location data and eliminating at least one of the one or more of the plurality of shipping rules with which the article is associated based on the first location," and "setting a state of the annunciator, based on a message that indicates a determination of whether to move the article from the first location to the second location" as specific limitations added to "what is well-understood, routine and conventional in the field and go beyond the mere concept of simply gathering and storing information using a computer." Appeal Br. 21.

Appellant's arguments are not persuasive. As explained in *Alice*, "the prohibition against patenting abstract ideas cannot be circumvented by attempting to limit the use of [the idea] to a particular technological environment." *Alice*, 573 U.S. at 222 (internal citations and quotations omitted). When viewed as a whole, nothing in the claim adds significantly more (i.e., an inventive concept) to the abstract idea.

The additional elements in the claim, identified above, amount to no more than mere instructions to apply the exception using generic computer components, which is insufficient to provide an inventive concept. *See, e.g.*, Spec. ¶¶ 26, 27, 35. As discussed above, Appellant does not direct our attention to anything in the Specification that indicates the claimed computer components perform anything other than well-understood, routine, and conventional processing functions, such as receiving, storing, analyzing, transmitting, and outputting data. *See Electric Power Group*, 830 F.3d at 1355 ("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"); *buySAFE, Inc. v. Google, Inc.*, 765 F.3d 1350, 1355 (Fed.

Cir. 2014) ("That a computer receives and sends the information over a network—with no further specification—is not even arguably inventive."); *Alice*, 573 U.S. at 224–26 (receiving, storing, sending information over networks insufficient to add an inventive concept). In short, each step does no more than require a generic computer to perform generic computer functions.

Furthermore, we are unable discern anything in the claims, even when the recitations are considered as an ordered 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 claimed receiving, storing, analyzing, transmitting and outputting of data "on a set of generic computer components." *See Bascom Glob. Internet Servs., Inc. v. AT&T Mobility LLC*, 827 F.3d 1341, 1350 (Fed. Cir. 2016).

Appellant does not separately argue the dependent claims. *See generall*y Appeal Br. 14–25. Accordingly, for the foregoing reasons we sustain the Examiner's 35 U.S.C. § 101 rejection of claims 1–7 and 9–14.

35 U.S.C. § 103(a) Rejections

The Examiner relies on Kodger to teach or suggest all of the limitations in independent claim 1 except: (1) "reading an article marker comprising article data identifying the article disposed at the first location, wherein when reading the article marker, *the first location is located at a warehouse or a distribution center*"; (2) "reading a location marker

comprising location data identifying a second location, wherein when reading the location marker, *the second location is located at the warehouse or the distribution center*"; (3) "transmitting the location data to the computing device," "using the computing device to determine whether to move the article from the first location to the second location, based at least in part on at least one of the shipping rules with which the article is associated and the location data"; (4) "transmitting a message from the computing device to an annunciator, wherein the message indicates determination of whether to move the article from the first location to the second location"; and (5) "setting a state of the annunciator, based on the message." Final Act. 16–17 (emphasis added).

The Examiner relies for these missing limitations on Shakes which, according to the Examiner, discloses reading a location marker located within a warehouse and using a control system to identify if the item should be moved to a second location within the warehouse. *Id.* at 17–18. The Examiner determines that it would have been obvious to combine Kodger with Shakes' "system and method of reading a location marker located within the warehouse [to] identif[y] if the item should be moved to the second location based on shipping rules . . ., and indicating on a device to move the item to the respective location. . .[to] predictably be able to prevent an incorrect order from being generated." *Id*. at 18.

The Examiner makes similar findings with respect to independent claim 9. Final Act. 20–25.

Appellant argues that one of ordinary skill in the art would not have modified Kodger with Shakes. Appeal Br. 27. Specifically, Appellant focuses on the Examiner's reliance on Shakes to disclose the first and

second location is at "one of a warehouse or a distribution center." *Id*. Appellant admits that "Shakes discloses scanning shipping items at two different locations within a single facility," but argues that "a person of ordinary skill in the art would not look to modify the scanning and tracking of shipping items at a variety of locations (e.g., warehouses and/or distribution facilities) along a shipping route (i.e., the system of Kodger) with a system of scanning these shipping items multiple times at a single warehouse or distribution facility (i.e., the system of Shakes)." *Id*. at 28.

Appellant argues that such a modification would render Kodger unsatisfactory for its intended purpose or function because "performing more than one scan at each intermediate location would be an unnecessary and inefficient modification." *Id*. at 29. Appellant also argues that such a modification to Kodger would fail to track the shipments as they proceed along a shipping route between multiple locations. *Id*.

Appellant's arguments are not persuasive. Kodger generally relates to tracking shipped items based upon a predetermined set of expected occurrences. Kodger 3:25–29. These predetermined expected occurrences are derived from event-driven data sources, such as, for example, "package level detail scans; event-driven tracking/visibility systems; time in transit, including zip code to zip code and building to building; a distribution system's package flows between service buildings and between specific service sorts . . . building and sort pairs . . . and, sort starts and finish times." *Id.*at 3:42–55. Kodger additionally teaches tracking a package as it is "transported through the carrier's internal routing." Kodger 15:50–53.

Shakes is generally directed to modular sorting stations for receiving and sorting picked items for order, and describes that such modular sorting

stations "may be positioned at a location away from the packing station(s), either in the same facility or building or . . . in a different facility or building." Shakes 1:8–9, 10:46–50, 11:13–15.

Although Kodger arguably teaches scanning items in a warehouse area through the above identified teachings, the Examiner relies on Shakes to explicitly teach "scanning of items in a warehouse area" (Ans. 15), and we find that the Examiner has sufficiently articulated how the claimed features are met by the proposed combination of Kodger and Shakes with some rational underpinning, consistent with the guidelines in *KSR Int'l Co. v. Teleflex Inc.*, 550 U.S. 398 (2007). *See* Ans. 15–17. We are not persuaded that such a modification to Kodger renders Kodger unsatisfactory for its intended purpose, as argued by Appellant, because the Examiner has shown that Kodger conducts various scan events throughout the shipping process, including "scanning packages in buildings and internal routing areas of a distribution chain." *See* Ans. 15–17.

For the foregoing reasons, we are not persuaded the Examiner erred in rejection independent claims 1 and 9 under 35 U.S.C. § 103(a). For the same reasons, we are not persuaded the Examiner erred in rejecting dependent claims 2–7 and 10–14 under 35 U.S.C. § 103(a), which were not separately argued.

CONCLUSION

In summary:

Claims Rejected	35 U.S.C. §	Reference(s)/Basis	Affirmed	Reversed
1–7, 9–14	101	Eligibility	1–7, 9–14	
1–4, 9–12	103(a)	Kodger, Shakes	1–4, 9–12	

Claims Rejected	35 U.S.C. §	Reference(s)/Basis	Affirmed	Reversed
7, 9	103(a)	Kodger, Shakes, Ghazarian	7, 9	
5, 13	103(a)	Kodger, Shakes, Rojas	5, 13	
6	103(a)	Kodger, Shakes, Moir	6	
Overall Outcome			1–7, 9–14	

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

AFFIRMED