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UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

Ex parte ROBERT STOWE

Appeal 2017-007673¹
Application 14/801,468²
Technology Center 3600

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 1–20. We have jurisdiction under 35 U.S.C. § 6(b).

We AFFIRM.

¹ Our decision references Appellant’s Appeal Brief (“App. Br.,” filed December 8, 2016) and Reply Brief (“Reply Br.,” filed April 26, 2017), and the Examiner’s Answer (“Ans.,” mailed February 27, 2017) and Final Office Action (“Final Act.,” mailed July 15, 2016).

² 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. ¶ 2).

Claims 1, 5, 9, and 15 are the independent claims on appeal. Claim 1, reproduced below, is illustrative of the claimed subject matter:

1. A computer-implemented method comprising:
 - receiving, via one or more computer processors, first electronic shipment information for a first shipment en route to be delivered to a destination location, wherein (a) the first shipment has departed a shipper location but has not been delivered to the destination location, and (b) the first electronic shipment information (i) identifies the destination location of the first shipment, (ii) identifies an estimated delivery date for the first shipment based at least in part on a first class of service associated with the first shipment, and (iii) is stored in one or more shipping databases;
 - receiving, via the one or more computer processors, second electronic shipment information for a second shipment en route to be delivered to the destination location, wherein (a) the second shipment has departed a shipper location but has not been delivered to the destination location, and (b) the second electronic shipment information (i) identifies the destination location of the second shipment, (ii) identifies an estimated delivery date for the second shipment based at least in part on a second class of service associated with the second shipment, and (iii) is stored in the one or more shipping databases;
 - determining, via the one or more computer processors and based at least in part on the first electronic shipment information and the second electronic shipment information, whether delivery of the first shipment and delivery of the second shipment to the destination location can occur concurrently by modifying the first class of service for the first shipment;

responsive to determining that delivery of the first shipment and delivery of the second shipment can occur concurrently by modifying the first class of service for the first shipment:

modifying, via the one or more computer processors, the first electronic shipment information for the first shipment to change the first class of service to effect concurrent delivery of the first shipment concurrently with the second shipment at the destination location, and

flagging (a) the first electronic shipment information and (b) the second electronic shipment information to indicate the first shipment and the second shipment are aggregated for a concurrent delivery, the flagging comprising a code corresponding to the number of shipments aggregated in the concurrent delivery.

REJECTION

Claims 1–20 are rejected under 35 U.S.C. § 101 as directed to a judicial exception without significantly more.

ANALYSIS

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 abstract ideas” are not patentable. *Alice Corp. v. CLS Bank Int’l*, 134 S. Ct. 2347, 2354 (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.*, 134 S. Ct. at 2355. 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).

The Court acknowledged in *Mayo*, that “all inventions at some level embody, use, reflect, rest upon, or apply laws of nature, natural phenomena, or abstract ideas.” *Mayo*, 566 U.S. at 71. Therefore, the Federal Circuit has instructed that claims are to be considered in their entirety to determine “whether their character as a whole is directed to excluded subject matter.” *McRO, Inc. v. Bandai Namco Games Am., Inc.*, 837 F.3d 1299, 1312 (Fed. Cir. 2016) (quoting *Internet Patents Corp. v. Active Network, Inc.*, 790 F.3d 1343, 1346 (Fed. Cir. 2015)).

In rejecting the pending claims under § 101, the Examiner determined that the claims are directed to “aggregating the delivery of multiple parcels to a location,” which the Examiner determined is “a fundamental economic practice and merely 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.*). In this regard, the Examiner determined that the only additional elements in the claims, beyond

the abstract idea, are the one or more computer processors, i.e., generic computer components, which are not enough to transform a patent-ineligible abstract idea into a patent-eligible invention (*id.*).

Appellant argues that the pending claims are not directed to methods for combining shipments that may be performed manually by a human; instead, according to Appellant, the claims recite computer-specific methodologies for retrieving and modifying computer-stored, electronic shipment information for a plurality of shipments to flag those shipments as aggregated for concurrent delivery (App. Br. 14). Substantially quoting the language of independent claim 1, Appellant, thus, asserts that the “recited features are not simply performable by a human, but are instead specifically tailored to operate in a computer environment” (*id.* at 14–15).

Appellant appears to be arguing that any invention that cannot be performed manually by a human, because the claim recites a computer is, therefore, not abstract. Yet, a substantially similar argument was expressly rejected by the Court in *Alice*. See *Alice Corp.*, 134 S. Ct. at 2358 (“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 either entirely in the human mind or manually, using pen and paper, are, therefore, not directed to abstract ideas.

Moreover, we are not convinced here that there is no human analog for the invention. Although claim 1, for example, recites the method is

performed “via one or more computer processors,” as the Examiner observes, a human, e.g., a mail employee, could determine that two packages are being shipped to the same address and then modify the mailing classes so that the packages are delivered at the same time (Ans. 2).

Turning to step two of the *Mayo/Alice* framework, Appellant argues that even if the claims are directed to an abstract idea, the claims are nonetheless patent-eligible because the claims recite significantly more than the abstract idea itself (App. Br. 16). Appellant asserts that claims 1–20 provide improvements to computer database environments, used in the field of shipment tracking and transportation, by identifying a plurality of shipments that may be consolidated to provide concurrent delivery of the same, and disseminating and storing updated shipping information for each of these shipments to ensure the shipments are appropriately handled as they are transported through a carrier’s transportation network (*id.* at 17; *see also* Reply Br. 7–8). Yet, Appellant does not explain how, and we fail to see how, consolidating shipments for concurrent delivery somehow constitutes an improvement in computer databases. We also find nothing from our review of the Specification, nor does Appellant direct us to any portion of the Specification, which attributes any improvement in computer databases to the claimed invention.

It clearly appears 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 order to reduce the costs and inefficiencies associated with the delivery process (*see, e.g.*, Spec. ¶¶ 2–4, 12). Considered in light of the Specification, the claimed invention, thus, appears to be focused on addressing a business need, 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.* ¶12), and not on any claimed means for accomplishing this goal that improves technology.

We also cannot 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). 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).

Appellant ostensibly maintains here the claimed invention, like that in *BASCOM*, provides a technical improvement (App. Br. 18). But we are not persuaded that combining shipments to a common location to minimize the number of deliveries to that location is a technological improvement, rather than an improvement to a business practice.

Responding to the Examiner’s Answer in the Reply Brief, and citing *Enfish, LLC v. Microsoft Corp.*, 822 F.3d. 1327 (Fed. Cir. 2016) and *McRO*, 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. 4). Appellant, thus, attempts to draw a parallel between the present claims and the claims in *Enfish* and *McRO*. However, we do not agree that any such parallel exists.

Appellant ostensibly maintains 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.”); *see also* App. Br. 15–16 (asserting that, like the claims in *McRO*, the present claims use limited rules in a process specifically designed to achieve an improved technological result)). 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 here that the present situation is like the one in *McRO* where computers were unable to make certain subjective determinations, i.e., regarding morph weight and phoneme timings, which could only be made prior to the claimed invention by human animators.

The ‘576 patent, at issue in *McRO*,³ 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

³ U.S. Patent No. 6,307,576.

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.

We also cannot agree with Appellant that the present claims, like those at issue in *DDR Holdings, LLC v. Hotels.com, L.P.*, 773 F.3d 1245 (Fed. Cir. 2014), are “specifically directed to concepts for solving a problem arising exclusively in a computer-network environment” (Reply Br. 6–7). 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 7). 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 patentable 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 here 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,” claim 1, for example, merely recites “determining, . . . based at least in part on the first electronic shipment information and the second electronic shipment information, whether delivery of the first shipment and delivery of the second shipment to the destination location can occur concurrently.” In other words, the claim recites a result without meaningfully limiting how the claimed method achieves that result. We also find nothing in the Specification, nor does Appellant direct us to anything in the Specification, to indicate that this determination requires any specialized computer hardware or inventive computer components, invokes any assertedly inventive programming, or that the claimed invention is implemented using other than generic computer components to perform generic computer functions, e.g., receiving and processing information, which is not enough for patent-eligibility.

We are not persuaded, on the present record, that the Examiner erred in rejecting claims 1–20 under 35 U.S.C. § 101. Therefore, we sustain the Examiner’s rejection.

DECISION

The Examiner’s rejection of claims 1–20 under 35 U.S.C. § 101 is affirmed.

Appeal 2017-007673
Application 14/801,468

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