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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
12/356,669	01/21/2009	MELANIE R. BARKER	08-DIS-230-PR-US-UTL	9295
63652	7590	01/02/2019	EXAMINER	
DISNEY ENTERPRISES, INC. c/o Marsh Fischmann & Breyfogle LLP 8055 East Tufts Avenue Suite 450 Denver, CO 80237			CHOY, PAN G	
			ART UNIT	PAPER NUMBER
			3624	
			NOTIFICATION DATE	DELIVERY MODE
			01/02/2019	ELECTRONIC

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UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

Ex parte MELANIE R. BARKER, KURT KAUFMANN,
JOSE MOLA, G. NEIL SIMMONS, PETER S. BUCZKOWSKI,
DOUGLAS C. LORD, LARRY B. ROOS, FRANK J. TORTORICI JR.,
and KATHLEEN A. KILMER

Appeal 2018-000080¹
Application 12/356,669
Technology Center 3600

Before HUBERT C. LORIN, BIBHU R. MOHANTY, and
BRADLEY B. BAYAT, *Administrative Patent Judges*.

BAYAT, *Administrative Patent Judge*.

DECISION ON APPEAL

Melanie R. Barker et al. (“Appellants”)² appeal under 35 U.S.C. § 134(a) from the Examiner’s decision rejecting claims 1–4, 8, 12, 14, 15, 18, and 21–27 under 35 U.S.C. § 101 as directed to non-statutory subject matter. We have jurisdiction under 35 U.S.C. § 6(b).

We AFFIRM.

¹ Our Decision references Appellants’ Appeal Brief (“Appeal Br.,” filed April 21, 2017), Reply Brief (“Reply Br.,” filed October 3, 2017), the Examiner’s Answer (“Ans.,” mailed August 28, 2017), and Final Office Action (“Final Act.,” mailed Dec. 6, 2016).

² Appellants identify “Disney Enterprises, Inc.” as the real party in interest. Appeal Br. 1.

STATEMENT OF THE CASE

Claimed Subject Matter

This application is titled “Determining Demand Associated with Origin-Destination Pairs for Bus Ridership Forecasting.” Spec., Title. Appellants’ “invention relates, in general, to methods and systems for predicting the number of riders or ridership for public or private transportation such as buses or other vehicles and planning deployment or dispatching of buses/vehicles and drivers based on such ridership predictions.” Spec. ¶ 1.

Claims 1, 8, and 15 are the independent claims on appeal. Independent claim 1, reproduced below, is illustrative of the subject matter on appeal.

1. A method comprising:

receiving a set of count data for at least one vehicle operating to transport passengers along a route with multiple stops, wherein the route extends between a first origin and a first destination, wherein at each of the stops between the first origin and first destination the passengers elect to remain on the at least one vehicle or to disembark, and wherein the count data comprises a count of passengers getting on each vehicle at each of the stops and a count of passengers getting off each vehicle at each of the stops;

determining a demand for pairs of the stops on the route based on the on counts and the off counts for the at least one vehicle;

providing the demand for pairs of the stops on the route;
and

generating a forecast of future demand for the route based on the demand for pairs of the stops on the route,

wherein the demand for pairs of the stops on the route is for predefined time periods for operating the at least one vehicle on the route and

wherein the demand of at least some of the pairs of the stops is proportional to the off counts at one of the stops in the pairs relative to the off counts a set of the stops in the pairs.

Appeal Br. 17 (Claims App.).

ANALYSIS

On October 4, 2016, in a prior Decision on Appeal, the Board entered a new ground of rejection of then-pending claims 1–6, 8, 12, 14, 15, and 18–27 under § 101. Appellants filed an amendment on October 13, 2016, in which independent claims 1 and 15 were amended to include limitations from previously presented dependent claims.³ No new limitations have been added to the claims that were not present in the previous appeal. Claims 1–4, 8, 12, 14, 15, 18, and 21–27 are pending, and claims 5–7, 9–11, 13, 16, 17, 19, and 20 have been canceled. *See* Appeal Br. 17–20 (Claims App.).

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: “[I]aws of nature, natural phenomena, and

³ Specifically: independent claim 1 was amended to include limitations from canceled dependent claims 5 and 6; and independent claim 15 was amended to include limitations from canceled dependent claims 19 and 20. Claims 1 and 15 were also amended to delete various limitations including “a computer system” in claim 1, “a computing device” in claim 15, and “a translation module” in claims 1 and 15.

abstract ideas” are not patentable. *See, e.g., Alice Corp. Pty. Ltd. v. CLS Bank Int’l*, 573 U.S. 208, 216 (2014) (citation omitted).

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*, 573 U.S. at 217. The first step in that framework is to “determine whether the claims at issue are directed to one of those patent-ineligible concepts,” such as an abstract idea. *Id.* Abstract ideas include, but are not limited to, fundamental economic practices, methods of organizing human activities, an idea of itself, and mathematical formulas or relationships. *Id.* at 218–20. If the claims are not directed to a patent-ineligible concept, the inquiry ends. If, however, the claims are directed to a patent-ineligible concept, the inquiry proceeds to step two to look at the claim for “something more” by “examin[ing] 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.” *Id.* at 217, 221 (quoting *Mayo*, 566 U.S. at 72–73, 79). This inventive concept must do more than simply recite “well-understood, routine, conventional activity.” *Mayo*, 566 U.S. at 79.

Applying the framework in *Alice*, and as the first step of that analysis, the Examiner determines, as did the Board, that Appellants’ claims are “directed to forecasting demand for transportation services” which is a “fundamental economic practice.” Final Act. 5. Proceeding to the second step, the Examiner determines:

The abstract idea of using the historical data to generate a forecast of future demand for transportation services is not meaningfully transformed by applying it to buses or generic vehicles and taking into account known variables in efficiently managing a transportation system using generic computer components. Accordingly, the recited claim limitations, both individually and as an ordered combination, fail to transform the nature of the claim into a patent-eligible application.

Id. at 6–7.

Appellants argue independent claims 1, 8, and 15 separately and do not separately argue any dependent claims. *See* Appeal Br. 7–15; *see also* Reply Br. 2–7. Appellants contend that the Examiner’s analysis of each independent claim is erroneous under both step one (Appeal Br. 7–9; Reply Br. 4–7) and step two of *Alice* (Appeal Br. 9–15; Reply Br. 2–4).

Independent Method Claims 1 and 15

Under *Alice* step one, Appellants argue that “the Examiner erred in his statement of the abstract idea as the claims were not stated in a form that includes the features or aspects found by the Office/Board to be novel and non-obvious.” Appeal Br. 9. According to Appellants, “[w]ith such a restatement of the abstract idea, each of these claims is not similar to any abstract idea identified by the courts under recent case law, and the Examiner’s rejection of claims 1 and 15 should be reversed under Part 1 of the *Alice* Patent Eligibility Analysis.” *Id.*

We are not persuaded of error in the Examiner’s rejection. There is no requirement that the Examiner’s articulation of the abstract idea must copy the claim language or include allegedly “novel or non-obvious” features. Rather, the Federal Circuit has explained that “the ‘directed to’ inquiry applies a stage-one filter to claims, considered in light of the

specification, based on whether ‘their character as a whole is directed to excluded subject matter.’” *Enfish, LLC v. Microsoft Corp.*, 822 F.3d 1327, 1335 (Fed. Cir. 2016) (quoting *Internet Patents Corp. v. Active Network, Inc.*, 790 F.3d 1343, 1346 (Fed. Cir. 2015)). We ask 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. The Examiner’s determination here — that the claims are directed to “forecasting demand for transportation services” — is fully consistent with the Specification, including the claim language (*see, e.g.*, Spec, Title (“Determining Demand Associated with Origin-Destination Pairs for Bus Ridership Forecasting”), ¶ 1 (“The present invention relates, in general, to methods and systems for predicting the number of riders or ridership for public or private transportation such as buses or other vehicles and planning deployment or dispatching of buses/vehicles and drivers based on such ridership predictions,”), ¶ 7 (“The present invention addresses the above problems by providing methods and systems for forecasting future ridership and demand for bus and other transportation services based upon actual measured or counted use.”), original claim 1 (“[a] method for forecasting demand for transportation services”), original claim 15 (“[a] computer-based method for predicting future ridership on a transportation route”)).

Appellants’ invention relates to gathering passenger information for a vehicle’s route and generating a forecast of future demand for the route. The individual steps comprising the method, i.e., gathering information, analyzing same to determine a demand for pairs of the stops on the route, and generating a forecast of future demand for the route based on that

analysis, are similar to others that have been found to be abstract. *See, e.g., OIP Techs., Inc. v. Amazon.com, Inc.*, 788 F.3d 1359, 1361–62 (Fed. Cir. 2015) (a method comprising (1) testing prices, (2) gathering statistics about how customers reacted to the prices, (3) using that data to estimate outcomes, and (4) acting on estimated outcomes (i.e., automatically selecting and offering new prices based on estimated outcome) held to be directed to the abstract idea of price optimization). Monitoring vehicle passenger load status is also an abstract idea. *See Wireless Media Innovations, LLC v. Maher Terminals, LLC*, 100 F. Supp. 3d 405, 413 (D.N.J. 2015) (“monitoring locations, movement, and load status of shipping containers within a container-receiving yard, and storing, reporting and communicating this information in various forms through generic computer functions” held to be an abstract idea), *aff’d*, 636 F. App’x 1014 (Fed. Cir. 2016). And merely combining several abstract ideas does not render the combination any less abstract. *Cf. Shortridge v. Found. Constr. Payroll Serv., LLC*, No. 14-CV-04850-JCS, 2015 WL 1739256, at *11 (N.D. Cal. Apr. 14, 2015), *aff’d*, 655 F. App’x 848 (Fed. Cir. 2016).

Turning to the second step of the *Alice* framework, we “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.’” *Alice*, 573 U.S. at 217–18 (alteration in original) (quoting *Mayo*, 566 U.S. at 72–73). The Supreme Court in *Alice* cautioned that merely limiting the use of an abstract idea “to a particular technological environment” or implementing the abstract idea on a “wholly generic computer” is not sufficient as an additional feature to provide “practical assurance that the process is more than a drafting effort

designed to monopolize the [abstract idea] itself.” *Id.* at 223–24 (alteration in original) (quoting *Mayo*, 566 U.S. at 77).

Indeed, claim 1 does not even require the use of a generic computer to implement the claimed process. Claim 15 indicates in the preamble that the method is “computer-based” and several steps require storing information “in memory,” but claim 15 does not otherwise indicate that any steps are performed by a computer. As such, we do not see how claims 1 and 15 could provide an improvement to computer technology. The steps of claims 1 and 15 could all be performed by humans without a computer. *Cf.* *CyberSource Corp. v. Retail Decisions, Inc.*, 654 F.3d 1366, 1373 (Fed. Cir. 2011) (“[C]omputational methods which can be performed *entirely* in the human mind are the types of methods that embody the ‘basic tools of scientific and technological work’ that are free to all men and reserved exclusively to none.” (quoting *Gottschalk v. Benson*, 409 U.S. 63, 67 (1972))).

Appellants argue that the Board’s prior Decision (mailed October 4, 2016) contains evidence that the claims are patent eligible. According to Appellants, “[t]he Board’s finding that these limitations are non-obvious (i.e., are not well-understood, routine, or conventional) is very strong evidence that these limitations add significantly more to the Examiner-stated abstract idea of forecasting demand.” Appeal Br. 10.

Appellants’ argument is unpersuasive for at least two reasons. As a preliminary matter, nothing in the prior Decision constitutes a finding by the Board that any limitations are “non-obvious” or “not well-understood, routine, or conventional.” Instead, in the prior Decision, the Board reversed the Examiner’s obviousness rejection of then pending claims 1–6, 8, 12, 14,

15, and 18–27 as unpatentable over Li and Rossetti because the Board determined that the Examiner had not adequately shown that Li discloses determining demand for a pair of stops.

Moreover, to the extent that Appellants maintain the elements of the claims necessarily amount to “significantly more” than the abstract idea, because the claimed methods are allegedly patentable over the prior art, Appellants misapprehend the controlling precedent. Although the second step in the *Alice* framework is termed a search for an “inventive concept,” the analysis is not an evaluation of novelty or nonobviousness, but rather, a search for “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.’” *Alice*, 573 U.S. at 217–18 (alteration in original) (quoting *Mayo*, 566 U.S. at 72–73). In other words, a novel and nonobvious claim directed to a purely abstract idea is, nonetheless, patent ineligible. *See Mayo*, 566 U.S. at 89–90 (rejecting the suggestion that Sections 102, 103, and 112 might perform the appropriate screening function and noting that in *Mayo* such an approach “would make the ‘law of nature’ exception . . . a dead letter”); *see also Genetic Techs. Ltd. v. Meril L.L.C.*, 818 F.3d 1369, 1376 (Fed. Cir. 2016) (“[U]nder the *Mayo/Alice* framework, a claim directed to a newly discovered law of nature (or natural phenomenon or abstract idea) cannot rely on the novelty of that discovery for the inventive concept necessary for patent eligibility”). “Groundbreaking, innovative, or even brilliant discovery does not by itself satisfy the § 101 inquiry.” *Ass’n for Molecular Pathology v. Myriad Genetics, Inc.*, 569 U.S. 576, 591 (2013). Indeed, “[t]he ‘novelty’ of any element or steps in a process, or even of the process itself, is of no relevance in determining

whether the subject matter of a claim falls within the § 101 categories of possibly patentable subject matter.” *Diamond v. Diehr*, 450 U.S. 175, 188–89 (1981).

Appellants next argue that “claim 1 includes limitations that apply generating demands for pairs of stops on a route [to a] particular machine in the form of a passenger vehicle (such as a bus).” Appeal Br. 11.

We are not persuaded by Appellants’ argument that the method is applied to “use of a particular machine,” because although the Supreme Court noted in *Bilski v. Kappos*, 561 U.S. 593, 604 (2010), that the machine-or-transformation test is a “useful and important clue” for determining patent eligibility, the Court, in *Mayo*, emphasized that satisfying the machine-or-transformation test, by itself, is not sufficient to render a claim patent-eligible, as not all transformations or machine implementations infuse an otherwise ineligible claim with an “inventive concept.” *See Mayo*, 566 U.S. at 84 (“[S]imply implementing a mathematical principle on a physical machine, namely a computer, [i]s not a patentable application of that principle.” (citing *Benson*, 409 U.S. at 64)).

Appellants’ argument that the method of claim 1 is applied to a “particular machine” is also unpersuasive because, as discussed, claim 1 does not require the performance of any steps by a machine, nor does it require the performance of any acts upon a machine. Claim 1 merely requires gathering information about a vehicle, namely, “a count of passengers getting on each vehicle at each of the stops and a count of passengers getting off each vehicle at each of the stops.” Claim 1 is not limited to any particular way of gathering a count of passengers, and ostensibly encompasses a train or bus conductor tallying a count of

passengers at each of the stops. Appellants cannot reasonably argue that counting the number of passengers getting on and off of a vehicle is an inventive concept.

Appellants highlight various limitations of claim 1 that allegedly provide “significantly more” than the concept of forecasting demand for transportation services. Appeal Br. 11–12. For example, Appellants argue that

claim 1 has a technical point of novelty (generating a forecast of future demand based on the demand for pairs of stops, with the demand being proportional to the off counts relative to the off counts at a set of the stops in the pairs that cannot be performed in the mind and/or does not make sense outside of a machine environment).

Id. at 11. But Appellants do not adequately explain why these steps cannot be performed in the human mind, or why these steps do not “make sense outside of a machine environment.” On the contrary, these steps could be performed for example by a stagecoach operator or train conductor counting passengers and making a forecast of future demand.

As to claim 15, Appellants argue that “the Examiner fails to indicate that the translating and processing steps involve the creation of origin-destination pair demand for operating time periods nor that this subject matter was found by the Board to be unconventional and not well-known (i.e., not obvious).” *Id.* at 13. But, as described in the Specification, translating passenger counts to origin-destination (OD) pairs is a mathematical formulation.⁴ For example, paragraph 20 discloses “[a] conversion or translation algorithm may be used to convert raw ridership to

⁴ See, e.g., Spec. ¶¶ 20–21, 33.

demand by OD pair by a time period (e.g., demand for an OD pair for N minutes such as 15 minute periods, 30 minute periods, and the like).” “The novelty of the algorithm, however, does not determine whether the claim recites an inventive concept.” *Coffelt v. NVIDIA Corp.*, 680 F. App’x 1010, 1011 (Fed. Cir. 2017), *cert. denied*, 137 S. Ct. 2143 (2017). Indeed, “[i]f a claim is directed essentially to a method of calculating, using a mathematical formula, even if the solution is for a specific purpose, the claimed method is nonstatutory.” *Parker v. Flook*, 437 U.S. 584, 595 (1978) (quoting *In re Richman*, 563 F.2d 1026, 1030 (CCPA 1977)).

We conclude that claims 1 and 15 do not contain an inventive concept sufficient to “transform the nature of the claim’ into a patent-eligible application.” *Alice*, 573 U.S. at 217 (citation omitted).

In view of the foregoing, we are not persuaded that the Examiner erred in concluding that claims 1 and 15 are directed to patent-ineligible subject matter. Accordingly, we sustain the Examiner’s rejection of claims 1 and 15 under 35 U.S.C. § 101, including their dependent claims 2–4, 18, and 21–27, which are not separately argued.

Independent System Claim 8

Challenging the Examiner’s determination as to claim 8 under *Alice* step one, Appellants make similar arguments as for claims 1 and 15 discussed above. *See* Appeal Br. 7–8. Appellants have not adequately explained how the step one analysis of claim 8 differs from the analysis of claims 1 and 15, and Appellants’ arguments as to claim 8 are unpersuasive for the same reasons.

Appellants argue that claim 8 is not directed to an abstract idea because it recites a transportation system that “includes buses, an automatic passenger counter on each of the buses, a vehicle location mechanism on each of the buses, and a ridership prediction system in wireless communication with the buses and their counters and location mechanisms.” *Id.* at 8. We do not agree.

Like method claims 1 and 15, system claim 8 is directed to the abstract idea of forecasting demand for transportation services. *Cf. Alice*, 573 U.S. at 226 (“[T]he system claims are no different from the method claims in substance.”). Although it is true that the system of claim 8 includes additional devices not present in the method claims, the focus of claim 8 as a whole is on predicting ridership demand. The additional limitations, including “a plurality of buses,” “an automatic passenger counter positioned on each of the buses,” and “a vehicle location mechanism positioned on each of the buses” are properly considered under the step two of *Alice*.

The introduction of these additional limitations into claim 8 does not alter the analysis. To qualify as an inventive concept under step two of *Alice*, the implementation of the abstract idea must involve “more than performance of ‘well-understood, routine, [and] conventional activities previously known to the industry.’” *Content Extraction and Transmission LLC v. Wells Fargo Bank, Nat. Ass’n*, 776 F.3d 1343, 1347–48 (Fed. Cir. 2014) (alteration in original) (quoting *Alice*, 573 U.S. at 225).

Claim 8 uses conventional data-gathering devices to perform well-understood, routine, conventional activities previously known to the industry. We are not apprised of anything in the claims, understood in light

of the Specification that requires components other than off-the-shelf, conventional components such as buses, automatic passenger counters, and vehicle location mechanisms. As in *Alice*, the hardware components of claim 8 are “purely functional and generic.” *Alice*, 573 U.S. at 226. For example, Appellants do not contend that there is anything assertedly inventive about the “plurality of buses” in claim 8.⁵ The data-gathering devices perform their expected, conventional functions. The Specification does not disclose a new automatic passenger counter⁶ or a new vehicle location mechanism.⁷ *Cf. In re TLI Commc’ns LLC Patent Litig.*, 823 F.3d 607, 612 (Fed. Cir. 2016) (“The specification does not describe a new telephone, a new server, or a new physical combination of the two. The specification fails to provide any technical details for the tangible components, but instead predominately describes the system and methods in purely functional terms.”). Claim 8 also uses some unspecified computer to perform well-understood, routine, conventional activities previously known

⁵ See Spec. ¶ 2 (“Public transportation has long provided buses that travel along predefined routes and pick up and drop off passengers along the route.”).

⁶ See Spec. ¶ 24 (“A variety of APCs 114 may be used such as infrared beam-type APCs (e.g., passive IR counters, target reflective IR counters, active IR counters, passive optical, or the like), radio beam APCs, pressure pad-based APCs, magnetic APCs, induction loop APCs, and the like located on the path(s) of the passengers (e.g., near the door(s) of the bus 110).”).

⁷ See Spec. ¶ 25 (“To provide location information, the bus 110 may include a location device 116 such as, but not limited to, an automatic vehicle location (AVL) component that uses a satellite-based global positioning system (GPS) antenna 118 to obtain the location of the bus 110 when the counts are made by the APC 114.”).

to the industry, such as receiving data from the data-gathering devices and analyzing data and performing mathematical calculations. *See Bancorp Servs., L.L.C v. Sun Life Assur. Co. of Canada (U.S.)*, 687 F.3d 1266, 1278 (Fed. Cir. 2012) (“[T]he use of a computer in an otherwise patent-ineligible process for no more than its most basic function – making calculations or computations – fails to circumvent the prohibition against patenting abstract ideas and mental processes.”).

Appellants reproduce two “wherein” clauses of claim 8,⁸ and argue “[t]he Examiner in the final Office Action offers no proof or evidence that these are mere well-known variables.” Appeal Br. 13; *see also* Reply Br. 2–4. Although the ultimate determination of eligibility is a question of law, our reviewing court recently held “[t]he patent eligibility inquiry may contain underlying issues of fact.” *Berkheimer v. HP Inc.*, 881 F.3d 1360, 1365 (Fed. Cir. 2018) (citing *Mortg. Grader, Inc. v. First Choice Loan Servs. Inc.*, 811 F.3d 1314, 1325 (Fed. Cir. 2016) (“The § 101 inquiry ‘may contain underlying factual issues.’”)). The court in *Berkheimer* explained “[w]hen there is no genuine issue of material fact regarding whether the claim element or claimed combination is well-understood, routine, [or] conventional to a skilled artisan in the relevant field, this issue can be decided on summary judgment as a matter of law.” 811 F.3d at 1368. Thus, evidence may be helpful where, for instance, facts are in dispute, but

⁸ Namely, “wherein a demand is calculated for predefined time periods of operation of the buses based on the ridership,” and “wherein the demand calculated for each of the OD pairs is determined based on an on count for an origin stop and based on a ratio of the off count for a corresponding destination stop to a total off count for the route.”

evidence is not always necessary. On the record before us, Appellants have not persuaded us that evidence is necessary in this case.

As discussed with regard to claim 15, the Specification explains that translating passenger counts to origin-destination (OD) pairs is a mathematical formulation.⁹ The same is true for the calculation of demand profiles for the origin-destination pairs for a future operating period for the buses.¹⁰ The Examiner is not required to produce evidence to show that claimed mathematical formulations and variables are well-known because the Supreme Court has held that such limitations are to be treated as a familiar part of the prior art.

The process itself, not merely the mathematical algorithm, must be new and useful. Indeed, the novelty of the mathematical algorithm is not a determining factor at all. Whether the algorithm was in fact known or unknown at the time of the claimed invention, as one of the “basic tools of scientific and technological work,” *see Gottschalk v. Benson*, 409 U.S., at 67 it is treated as though it were a familiar part of the prior art.

Parker v. Flook, 437 U.S. at 591–92 (parallel citation omitted).¹¹

Unlike the invention in *Diehr*, the invention here does not involve any transformation of a physical article “to a different state or thing.” 450 U.S. at 191. Data is gathered using conventional techniques and mathematical calculations are performed to calculate future demand. *Cf. Id.* (“A mathematical formula as such is not accorded the protection of our patent

⁹ *See, e.g.*, Spec. ¶¶ 20–21, 33.

¹⁰ *See, e.g.*, Spec. ¶ 34.

¹¹ Citing *Mackay Radio & Telegraph Co. v. Radio Corp. of America*, 306 U.S. 86 (1939), and *Funk Bros. Seed Co. v. Kalo Co.*, 333 U.S. 127, 130 (1948).

laws, *Gottschalk v. Benson*, 409 U.S. 63 (1972), and this principle cannot be circumvented by attempting to limit the use of the formula to a particular technological environment.” (parallel citations omitted)).

We do not see, and Appellants do not adequately explain, what particular assertedly inventive technology for performing the recited functions is required for achieving the claimed result. *See Credit Acceptance Corp. v. Westlake Servs.*, 859 F.3d 1044, 1057 (Fed. Cir. 2017) (“[T]he claims do not provide details as to any non-conventional software for enhancing the financing process.”); *see also Intellectual Ventures I LLC v. Capital One Fin. Corp.*, 850 F.3d 1332, 1342 (Fed. Cir. 2017) (“Our law demands more” than claim language that “provides only a result-oriented solution, with insufficient detail for how a computer accomplishes it.”).

We have considered Appellants’ remaining arguments regarding patent eligibility, but we conclude they are not persuasive of error in the rejection. Accordingly, we sustain the rejection of claim 8 under 35 U.S.C. § 101, including dependent claims 12 and 14, which are not separately argued.

DECISION

The rejection 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).

AFFIRMED