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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
12/080,901	04/07/2008	Dinakara Nagalla	S834.12-0016	6448
164	7590	12/30/2019	EXAMINER	
KINNEY & LANGE, P.A. 312 SOUTH THIRD STREET MINNEAPOLIS, MN 55415-1002			AN, IG TAI	
			ART UNIT	PAPER NUMBER
			4195	
			NOTIFICATION DATE	DELIVERY MODE
			12/30/2019	ELECTRONIC

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UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

Ex parte DINAKARA NAGALLA and KEVIN STOLTZFUS

Appeal 2018-000104
Application 12/080,901
Technology Center 3600

Before MURRIEL E. CRAWFORD, KEVIN W. CHERRY, and
BRADLEY E. BAYAT, *Administrative Patent Judges*.

CHERRY, *Administrative Patent Judge*.

DECISION ON APPEAL

STATEMENT OF THE CASE

Appellant¹ appeals under 35 U.S.C. § 134(a) from the Examiner's rejection of claims 1–8, 10–32, and 34–45. We have jurisdiction under 35 U.S.C. § 6(b).

We AFFIRM.

¹ We use the term “Appellant” to refer to “applicant” as defined in 37 C.F.R. § 1.42. Our decision references Appellant's Appeal Brief (“Br.,” filed February 14, 2017), and the Examiner's Answer (“Ans.,” mailed July 13, 2017) and Final Office Action (“Final Act.,” mailed October 18, 2016). Appellant identifies the real party in interest as FleetMX Aviation Solutions Inc. Br. 2.

CLAIMED INVENTION

The claimed invention relates to a system and method for managing line maintenance for aircraft (Spec. ¶ 1).

Claim 1, one of two independent claims, is illustrative of the subject matter on appeal and is reproduced below (bracketing added).

1. A computer implemented method of managing execution of line maintenance for an aircraft, the method comprising:
 - [a] creating an electronic scheduled bill of work comprising a plurality of planned line maintenance tasks, including tasks generated based on faults reported by electronic built in test equipment;
 - [b] creating an electronic work-in-progress bill of work comprising the scheduled bill of work and a plurality of unplanned line maintenance tasks;
 - [c] assigning the aircraft to a maintenance location based on a flight schedule of the aircraft, on times when line maintenance is due, and on availability of maintenance space and personnel;
 - [d] electronically validating performance for each of the tasks in the work-in-progress bill of work; and
 - [e] creating an electronic maintenance release for the aircraft.

(Br. 6, Claims App.).

REJECTION

Claims 1–8, 10–32, and 34–45 are rejected under 35 U.S.C. § 101 as directed to patent-ineligible subject matter.

ANALYSIS

Appellant argues the pending claims as a group (Br. 4–5). We select independent claim 1 as representative. The remaining claims stand or fall with claim 1. *See* 37 C.F.R. §41.37(c)(1)(iv).

Under 35 U.S.C. § 101, an invention is patent eligible if it claims a “new and useful process, machine, manufacture, or composition of matter.”

35 U.S.C. § 101. The Supreme Court, however, has long interpreted § 101 to include an implicit exception: “[l]aws of nature, natural phenomena, and abstract ideas” are not patentable. *Alice Corp. v. CLS Bank Int’l*, 573 U.S. 208, 216 (2014).

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

In rejecting the pending claims under 35 U.S.C. § 101, the Examiner determined that independent claim 1 is directed to “creating bill of work for maintenance, assigning the aircraft to a maintenance location based on criteria, validating performance, and creating maintenance release,” which the Examiner concluded is simply a “method of organizing human activities for generating rule based tasks for aircraft maintenance process” (Final

Act. 3–4). The Examiner further determined that the claims do not include “meaningful limitation(s)” that “amounts to significantly more than the abstract idea itself” (*id.* at 4–5).

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

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

The first step in the *Mayo/Alice* framework, as mentioned above, is to determine whether the claims at issue are “directed to” a patent-ineligible

² The 2019 Revised Guidance supersedes MANUAL OF PATENT EXAMINING PROCEDURE (“MPEP”) § 2106.04(II) and also supersedes all versions of the USPTO’s “Eligibility Quick Reference Sheet Identifying Abstract Ideas.” *See* 2019 Revised Guidance, 84 Fed. Reg. at 51 (“Eligibility-related guidance issued prior to the Ninth Edition, R-08.2017, of the MPEP (published Jan. 2018) should not be relied upon.”). Accordingly, Appellant’s arguments challenging the sufficiency of the Examiner’s rejection will not be addressed to the extent those arguments are based on now superseded USPTO guidance.

concept, e.g., an abstract idea. *Alice Corp.*, 573 U.S. at 217. This first step, as set forth in the 2019 Revised Guidance (i.e., Step 2A), is a two-prong test; in Step 2A, Prong One, we look to whether the claim recites a judicial exception, e.g., one of the following three groupings of abstract ideas: (1) mathematical concepts; (2) certain methods of organizing human activity, e.g., fundamental economic principles or practices, commercial or legal interactions; and (3) mental processes. 2019 Revised Guidance, 84 Fed. Reg. at 54. If so, we next consider whether the claim includes additional elements, beyond the judicial exception, that “integrate the [judicial] exception into a practical application,” i.e., that apply, rely on, or use the judicial exception in a manner that imposes a meaningful limit on the judicial exception, such that the claim is more than a drafting effort designed to monopolize the judicial exception (“Step 2A, Prong Two”). *Id.* at 54–55. Only if the claim (1) recites a judicial exception and (2) does not integrate that exception into a practical application do we conclude that the claim is “directed to” the judicial exception, e.g., an abstract idea.

Appellant argues that the Examiner failed to provide a reasoned explanation for why the claims correspond to a concept that the court have identified as an abstract idea, and, to the extent that there is explanation, it is based on the “mistaken assertion that these limitations are directed towards ‘a method of organizing human activity for generating rule based tasks.’” Br. 4.

We do not find these arguments persuasive. In particular, the Examiner identified the claim limitations that made up the judicial exception, including the relevant portions of steps (a)–(e) in claim 1, and analogized those limitations to claims at issue in previous cases. *See* Final

Act. 3–5; Ans. 7–8. The Examiner also explained why the claim did not include additional elements that integrated the judicial exception into a practical application. *See* Final Act. 4; Ans. 7–8. Therefore, we find that the Examiner made out a prima facie case of unpatentability under § 101.

We also do not agree with Appellant that the Examiner erred in determining that claim 1 is directed to an abstract idea (Br. 4). 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)). It asks whether the focus of the claims is on a specific improvement in relevant technology or on a process that itself qualifies as an “abstract idea” for which computers are invoked merely as a tool. *See id.* at 1335–36. Here, the Specification (including the claim language) makes clear that the claims focus on an abstract idea, and not on any improvement to technology and/or a technical field.

The Specification is entitled “LINE MAINTENANCE MANAGER,” and describes, in the Background section, that aircraft require maintenance in order to remain airworthy, and that, to that end, aircraft manufacturers, the Federal Aviation Administration, and Maintenance Review Board (“MRB”) provide, and can continuously revise and update, aircraft maintenance requirements for various aircraft (Spec. ¶ 2). These aircraft maintenance requirements are documented in aircraft-specific MRB documents (*id.* ¶ 3). An MRB document details each task that must be accomplished on a particular aircraft, the requirements of that task, and the frequency with

which the task must be performed (*id.*). An MRB document can include 800 to 2,000 tasks that need to be accomplished anywhere from once a day to once every 20 years, and also tasks that need to be accomplished after the aircraft has achieved a specific number of flight hours, flight cycles, or other triggering aircraft use metrics (*id.*). The Specification explains that the MRB document for each aircraft details a “very complicated maintenance schedule,” and to ensure compliance with the MRB document, airlines must implement various tracking programs to monitor for the dates when tasks come due, as well as to log the completion of those tasks and any corrective actions taken (*id.* ¶ 4).

The Specification also explains that airlines seek to keep maintenance time at a minimum, and, as part of that effort, group task together into “letter checks” rather than perform the tasks one at a time as they come due (*id.* ¶ 5). Some letter checks can be performed overnight in a “line maintenance” environment where the aircraft remains airworthy because it can be reassembled quickly (*id.*). Other letter checks comprise largely numbers of tasks that require a substantial amount of time to complete (*id.*). Those more complicated checks are typically performed in a heavy maintenance environment in which the aircraft is taken out of service, and taken to a hanger, where it is taken apart, inspected, fixed, and reassembled over the course of one week to over a month (*id.*).

The Specification states that line maintenance presents unique challenges to ensure the aircraft remains in service or is delayed from service as little as possible because line maintenance can consist of a number of planned maintenance tasks and a number of unplanned maintenance tasks, both of which may include routine and non-routine tasks (those not detailed

in the MRB document) (*id.* ¶ 6). The Specification explains that “[p]lanned maintenance tasks are those tasks that may be scheduled ahead of performing the line maintenance on the aircraft,” and “unplanned maintenance tasks that arise just prior to or during the execution of line maintenance on the aircraft” (*id.*). On the other hand, unplanned tasks “cannot be scheduled because they arise dynamically in the line maintenance environment” (*id.*). The Specification states that “[a]lthough line maintenance can plan for a certain number of unplanned events . . . by estimating based on historical data for the aircraft, such unplanned maintenance tasks may nevertheless cause costly delays to the aircraft line maintenance if not handled quickly and efficiently” (*id.*).

The claimed invention intends to provide a computer-based method and system to manage execution of line maintenance including planned and unplanned maintenance tasks performed on an aircraft without removing the aircraft from service (*id.*). The Specification, thus, discloses that in one embodiment, creating an electronic scheduled bill of work comprising a plurality of planned tasks, creating an electronic work-in-progress bill of work comprising the scheduled bill of work and a plurality of unplanned tasks, electronically validating performance for each of the tasks in the work-in-progress bill of work, and creating an electronic maintenance release for the aircraft (*id.* ¶ 7). The Specification further discloses that the system and method may also assign the aircraft to a maintenance location, including assigning the aircraft to a station, i.e., a specific airport, and a hanger, ramp, or gate at the station (*id.* ¶ 16). The system may assign the station by analyzing the aircraft’s flight schedule to determine what stations the aircraft is passing through around the time the line maintenance is due

(*id.*). The system may also analyze each possible station's facility availability, including how many gates or hangers are open for use, and also the number, availability, and training levels of maintenance personnel at the station in order to minimize out of service time of the aircraft and maximize line maintenance efficiency (*id.*).

Consistent with this disclosure, claim 1 recites a computer implemented method of managing execution of line maintenance for an aircraft comprising: (1) creating an electronic scheduled bill of work of planned line maintenance tasks, i.e., "creating an electronic scheduled bill of work comprising a plurality of planned line maintenance tasks, including tasks generated based on faults reported by electronic built in test equipment" (step (a)); (2) creating an electronic bill of work in progress including the items from the scheduled electronic bill of work and additional unplanned line maintenance tasks, i.e., "creating an electronic work-in-progress bill of work comprising the scheduled bill of work and a plurality of unplanned line maintenance tasks" (step (b)); (3) assigning the aircraft to maintenance location based its flight schedule, when the maintenance tasks are due, and on the availability of maintenance personnel, i.e., "assigning the aircraft to a maintenance location based on a flight schedule of the aircraft, on times when line maintenance is due, and on availability of maintenance space and personnel" (step (c)); (4) electronically validating the performance of the tasks in the work-in-progress bill of work, i.e., "electronically validating performance for each of the tasks in the work-in-progress bill of work" (step (d)); and (5) creating an electronic maintenance release for the aircraft, i.e., "creating an electronic maintenance release for the aircraft" (step (e)).

These limitations, when given their broadest reasonable interpretation, recite creating a bill of work of scheduled tasks of aircraft line maintenance, creating a second bill of work that includes both the scheduled line maintenance tasks and unplanned line maintenance tasks, assigning the aircraft to a maintenance location based on the aircraft's schedule and the availability of space personnel, validating the work once its completed, and then creating an electronic release for the aircraft. Simply put, claim 1 recites observations, evaluation, and judgment (creating, assigning, and validating), i.e., mental processes—concepts performed in the human mind. *See* 2019 Revised Guidance, 84 Fed. Reg. at 52. Claim 1 also recites managing personal behavior or relationships (creating bills of work for maintenance personnel to perform, assigning aircraft to maintenance locations, validating the maintenance personnel have completed the work, and creating releases to allow the aircraft to resume service), which is a certain method of organizing human activity and, therefore, an abstract idea. *See* 2019 Revised Guidance, 84 Fed. Reg. at 52.

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

The only additional element recited in claim 1, beyond the abstract idea, is “[a] computer implemented method,” as recited in the preamble of the claim and reflected further in the claim by the term “electronic” or “electronically” in each of the limitations such that this additional element generally links the use of the judicial exception to a particular technological environment or field of use — an element that, as the Examiner observed,

are disclosed in the Specification as generic computer components and such (Non-Final Act. 9; *see also, e.g.*, Spec. ¶¶ 110–117; 84 Fed. Reg. at 55; MPEP 2106.05(h)). We find no indication in the Specification that the operations recited in claim 1 require any specialized computer hardware or other inventive computer components, i.e., a particular machine, invoke any assertedly inventive programming, or that the claimed invention is implemented using other than generic computer components to perform generic computer functions. *See DDR Holdings, LLC v. Hotels.com, L.P.*, 773 F.3d 1245, 1256 (Fed. Cir. 2014) (“[A]fter *Alice*, there can remain no doubt: recitation of generic computer limitations does not make an otherwise ineligible claim patent-eligible.”).

We also find no indication in the Specification that the claimed invention effects a transformation or reduction of a particular article to a different state or thing. Nor do we find anything of record, short of attorney argument, that attributes an improvement in technology and/or a technical field to the claimed invention or that otherwise indicates that the claimed invention integrates the abstract idea into a “practical application,” as that phrase is used in the 2019 Revised Guidance.³

Appellant asserts that “none of the steps of the claimed method are directed to human activity, and most relate specifically to tasks only

³ The 2019 Revised Guidance references MPEP § 2106.05(a)–(c) and (e) in describing the considerations that are indicative that an additional element or combination of elements integrates the judicial exception, e.g., the abstract idea, into a practical application. 2019 Revised Guidance, 84 Fed. Reg. at 55. If the recited judicial exception is integrated into a practical application, as determined under one or more of these MPEP sections, the claim is not “directed to” the judicial exception.

performable by a computer (e.g. electronic validation, or creation of an electronic bill of work based on reported faults from built in test equipment)” (Br. 4). We disagree. As the Background section of the Specification makes clear, line maintenance is a long-standing part of the airline industry (Spec. ¶¶ 2–6). There is no dispute that bills of work, assigning aircraft to maintenance locations, validating the work performed, and preparing a maintenance release are long-standing practices that have been performed manually. The “mere automation of manual processes using generic computers does not constitute a patentable improvement in computer technology.” *Credit Acceptance Corp. v. Westlake Servs.*, 859 F.3d 1044, 1055 (Fed. Cir. 2017); *see also Univ. of Fla. Res. Found, Inc. v. Gen. Elec. Co.*, 916 F.3d 1363, 1367 (Fed. Cir. 2019) (“This is a quintessential ‘do it on a computer’ patent: it acknowledges that data from bedside machines was previously collected, analyzed, manipulated, and displayed manually, and it simply proposes doing so with a computer. We have held such claims are directed to abstract ideas.”); *Apple, Inc. v. Ameranth, Inc.*, 842 F.3d 1229, 1242–43 (Fed. Cir. 2016) (“The patents can readily be understood as adding conventional computer components to well-known business practices. . . . The Supreme Court and this court have repeatedly determined that such claims are invalid under § 101. . . . It is not enough to point to conventional applications and say ‘do it on a computer.’” (citations omitted)); *CyberSource Corp. v. Retail Decisions, Inc.*, 654 F.3d 1366, 1372–73 (Fed. Cir. 2011) (holding 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[]”). Indeed, the Specification explains that many of the steps are performed, at least in part, by the human using the

computer. *See, e.g.*, Spec. ¶¶ 14 (“The planned maintenance tasks may be retrieved (step 20) automatically, through user interaction, or a combination of both by, for example, querying the database for the relevant maintenance tasks appropriate for the particular aircraft on the day the line maintenance is to be performed.”); 15 (“System 10 may then prioritize the planned tasks automatically, through user interaction, or a combination of both. . . . For example, system 10 may estimate, automatically or through user interaction, the amount of time, number of personnel, and tooling and materials required to complete each of the tasks.”). Thus, we are not persuaded that the claimed method does anything more than use generic computers as tools, and does not constitute the kind of improvement in computer functionality that is patent eligible.

We conclude, for the reasons outlined above, that claim 1 recites a method of organizing human activity and mental processes, i.e., an abstract idea, and that the additional elements recited in the claim are no more than generic components used as tools to perform the recited abstract idea. As such, they not integrate the abstract idea into a practical application. *See Alice Corp.*, 573 U.S. at 223–24 (“[W]holly generic computer implementation is not generally the sort of ‘additional featur[e]’ that provides any ‘practical assurance that the process is more than a drafting effort designed to monopolize the [abstract idea] itself.’” (quoting *Mayo*, 566 U.S. at 77)). Accordingly, we agree with the Examiner that claim 1 is directed to an abstract idea.

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

Having determined under step one of the *Mayo/Alice* framework that claim 1 is directed to an abstract idea, we next consider under Step 2B of the

2019 Revised Guidance, the second step of the *Mayo/Alice* framework, whether claim 1 includes additional elements or a combination of elements that provides an “inventive concept,” i.e., whether an additional element or combination of elements adds specific limitations beyond the judicial exception that are not “well-understood, routine, conventional activity” in the field (which is indicative that an inventive concept is present) or simply appends well-understood, routine, conventional activities previously known to the industry to the judicial exception. 2019 Revised Guidance, 84 Fed. Reg. at 56.

Appellant asserts here that the § 101 rejection cannot be sustained because the Examiner has failed to provide “any explanation supported by any evidence with regard to how the claimed invention as a whole is a well-understood, routine, conventional activity” (Appeal Br. 7–8). Specifically referencing steps (a) through (e), as recited in claim 1, Appellant, thus, maintains that the rejection is improper because the Examiner does not provide any evidence that “that at least a non-computer-implemented version of a computer-implemented process required by the claims was a well-understood, routine, conventional activity” (*id.* at 15–16; *see also id.* at 18–20, Reply Br. 3–4).

That argument is not persuasive at least because “the relevant inquiry is not whether the claimed invention as a whole is unconventional or non-routine,” *BSG Tech LLC v. BuySeasons, Inc.*, 899 F.3d 1281, 1290 (Fed. Cir. 2018), i.e., whether the claimed process merely automates “some well-known, routine, conventional activity that would otherwise be the same as the claimed process.” Instead, the question under step two of the *Mayo/Alice* framework (i.e., step 2B) is whether the claim includes

additional elements, i.e., elements other than the abstract idea itself, that “transform the nature of the claim’ into a patent-eligible application.” *Alice Corp.*, 573 U.S. at 217 (quoting *Mayo*, 566 U.S. at 79, 78). *See also Mayo*, 566 U.S. at 72–73 (requiring that “a process that focuses upon the use of a natural law also contain *other* elements or a combination of elements, sometimes referred to as an ‘inventive concept,’ sufficient to ensure that the patent in practice amounts to significantly more than a patent upon the natural law itself” (emphasis added)).

Appellant references steps (a) through (e), as recited in claim 1. Yet, these steps are part of the abstract idea itself; they are not additional elements to be considered when determining whether claim 1 includes additional elements or a combination of elements that is sufficient to amount to significantly more than the judicial exception.

It could not be clearer from *Alice*, that under step two of the *Mayo/Alice* framework, the elements of each claim are considered both individually and “as an ordered combination” to determine whether the additional elements, i.e., the elements *other* than the abstract idea itself, “transform the nature of the claim” into a patent-eligible application. *Alice Corp.*, 573 U.S. at 217 (internal quotations and citation omitted); *see Mayo*, 566 U.S. at 72–73 (requiring that “a process that focuses upon the use of a natural law also contain *other* elements or a combination of elements, sometimes referred to as an ‘inventive concept,’ sufficient to ensure that the patent in practice amounts to significantly more than a patent upon the natural law itself” (emphasis added) (internal citation omitted)). In other words, the inventive concept under step two of the *Mayo/Alice* framework cannot be the abstract idea itself:

It is clear from *Mayo* that the “inventive concept” cannot be the abstract idea itself, and *Berkheimer* . . . leave[s] untouched the numerous cases from this court which have held claims ineligible because the only alleged “inventive concept” is the abstract idea. *Berkheimer v. HP, Inc.*, 890 F.3d 1369, 1374 (Fed. Cir. 2018) (Moore, J., concurring); *see also BSG Tech*, 899 F.3d at 1290 (“It has been clear since *Alice* that a claimed invention’s use of the ineligible concept to which it is directed cannot supply the inventive concept that renders the invention ‘significantly more’ than that ineligible concept.”) (internal citation omitted).

The Examiner determined here, and we agree, that the only claim elements beyond the abstract idea are generic computer components used to perform generic computer functions (Final Act. 5) — a determination amply supported by, and fully consistent with the Specification (*see, e.g.*, Spec. ¶¶ 12, 33).⁴ Appellant cannot reasonably contend, nor does Appellant, that the operation of these components is not well-understood, routine, or conventional, where, as here, there is nothing in the Specification to indicate that the operations recited in claim 1 require any specialized hardware or inventive computer components, invoke any assertedly inventive software,

⁴ The Office’s April 19, 2018 Memorandum to the Examining Corps from Deputy Commissioner for Patent Examination Policy, Robert W. Bahr, entitled, Changes in Examination Procedure Pertaining to Subject Matter Eligibility, Recent Subject Matter Eligibility Decision (*Berkheimer v. HP, Inc.*), available at <https://www.uspto.gov/sites/default/files/documents/memo-berkheimer-20180419.PDF>, expressly directs that an examiner may support the position that an additional element (or combination of elements) is not well-understood, routine or conventional with “[a] citation to an express statement in the specification . . . that demonstrates the well-understood, routine, conventional nature of the additional element(s)” (*id.* at 3).

or that the claimed invention is implemented using other than generic computer components to perform generic computer functions, e.g., creating, assigning, and validating information.

We are not persuaded, on the present record, that the Examiner erred in rejecting independent claim 1 under 35 U.S.C. § 101. Therefore, we sustain the Examiner's rejection of independent claim 1, and claims 2–8, 10–32, and 34–45, which fall with claim 1.

CONCLUSION

In summary:

Claims Rejected	35 U.S.C. §	Reference(s)/Basis	Affirmed	Reversed
1–8, 10–32, 34–45	101	Eligibility	1–8, 10–32, 34–45	

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