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UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

Ex parte ALEJANDRO OSWALDO HERNANDEZ ROMERO,
MICHAEL J. WOICEKOWSKI and
OLEKSANDR BASANETS

Appeal 2020-000555
Application 15/905,117
Technology Center 3600

Before CARL W. WHITEHEAD JR., JEREMY J. CURCURI and
ADAM J. PYONIN, *Administrative Patent Judges*.

WHITEHEAD JR., *Administrative Patent Judge*.

DECISION ON APPEAL

STATEMENT OF THE CASE¹

Appellant is appealing the final rejection of claims 1–2, 4–9, 11–15
and 17–20 under 35 U.S.C. § 134(a).² Appeal Brief 11. Claims 1, 8 and 14

¹ Rather than reiterate Appellant’s arguments and the Examiner’s determinations, we refer to the Appeal Brief (filed August 16, 2019), the Reply Brief (filed October 30, 2019), the Final Action (mailed February 11, 2019) and the Answer (mailed August 30, 2019), for the respective details.

² We use the word Appellant to refer to “applicant” as defined in 37 C.F.R. § 1.42(a). Appellant identifies The Boeing Company as the real party in interest. Appeal Brief 3.

are independent. Claims 3, 10 and 16 are cancelled. *See* Final Action 2.
We have jurisdiction under 35 U.S.C. § 6(b).

We AFFIRM.

Introduction

According to Appellant, the claimed subject matter is directed to “personnel scheduling, and more specifically, to preparing schedules of tasks for personnel based on a likelihood that the schedules of tasks will not exceed a personal limit of a person assigned to the itinerary and/or based on priority ranking for the tasks.” Specification ¶ 2.

*Representative Claim*³

Claim 1 is reproduced below for reference (bracketed step lettering added):

1. A computer-implemented method, the method comprising:
 - [a] determining statistical distributions for time variances of various operations based on time variances during past instances of the various operations, wherein the time variances are variances from scheduled times for the various operations;
 - [b] determining a plurality of time variance buffers associated with the various operations based on statistical distributions associated with the various operations, each of the plurality of time variance buffers associated with at least one confidence interval of a plurality of confidence intervals;
 - [c] storing the plurality time variance buffers in a computer database, wherein at least some of the time variance buffers are stored in aggregated form in the computer database

³ Appellant argues independent claims 1, 8 and 14 as a group. *See* Appeal Brief 12. We select independent claim 1 as the representative claim focusing on subject matter common to independent claims 1, 8 and 14. *See* 37 C.F.R. § 41.37(c)(1)(iv).

and wherein the aggregated time variance buffers are associated with an aggregation identifier;

[d] retrieving the aggregated time variance buffers from the computer database using the aggregation identifier;

[e] determining a priority for an operation of the various operations;

[f] selecting one or more time variance buffers, of the plurality of time variance buffers, for the various operations, based on the determined priority, the plurality of confidence intervals, and the aggregated time variance buffers;

[g] identifying, by operation of one or more computer processors, a combination of operations from among the various operations wherein a sum of scheduled times for the combination of operations and the selected time variance buffers for the combination of operations do not exceed a personal time limit of personnel; and

[h] assigning the identified combination of operations to an itinerary.

Rejections on Appeal

Claims 1–2, 4–9, 11–15 and 17–20 stand rejected under 35 U.S.C. § 101 because the claimed subject matter as being directed to a judicial exception without significantly more. Final Action 3–6.

Claims 1–2, 4–9, 11–15 and 17–20 stand rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1–17 of U.S. Patent 9,911,101.. Final Action 6, 7.

PRINCIPLES OF LAW

A. Section 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.

However, the U.S. 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. Pty. Ltd. 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 Court’s two-part framework, described in *Mayo* and *Alice*. *Alice* 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, 67 (1972)). Concepts determined to be patent eligible include physical and chemical processes, such as “molding rubber products” (*Diamond v. Diehr*, 450 U.S. 175, 191 (1981)); “tanning, dyeing, making waterproof cloth, vulcanizing India rubber, smelting ores;” 182 n.7 (quoting *Corning v. Burden*, 56 U.S. 252, 267–68 (1853)); and manufacturing flour (*Benson*, 409 U.S. at 69 (citing *Cochrane v. Deener*, 94 U.S. 780, 785 (1876))).

In *Diehr*, the claim at issue recited a mathematical formula, but the Court held that “a claim drawn to subject matter otherwise statutory does not become nonstatutory simply because it uses a mathematical formula.” *Diehr*, 450 U.S. at 187, 191 (“We view respondents’ claims as nothing more than a process for molding rubber products and not as an attempt to patent a mathematical formula.”).

Having said that, the Court also indicated that a claim “seeking patent protection for that formula in the abstract . . . is not accorded the protection of our patent laws, and this principle cannot be circumvented by attempting to limit the use of the formula to a particular technological environment.” *Id.* (citing *Benson* and *Flook*), 187 (“It is now commonplace that an *application* of a law of nature or mathematical formula to a known structure or process may well be deserving of patent protection.”) (citation omitted).

If the claim is “directed to” an abstract idea, we turn to the second part 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.*

B. USPTO Section 101 Guidance

In January 2019, the U.S. Patent and Trademark Office (USPTO) published revised guidance on the application of [section] 101. *See* 2019

Revised Patent Subject Matter Eligibility Guidance, 84 Fed. Reg. 50 (January 7, 2019) (“2019 Revised Guidance”).⁴ “All USPTO personnel are, as a matter of internal agency management, expected to follow the guidance.” *See* 2019 Revised Guidance; *see also* October 2019 Update.

Under the 2019 Revised Guidance and the October 2019 Update, 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) (“Step 2A, Prong One”); and
- (2) additional elements that integrate the judicial exception into a practical application (*see* MPEP § 2106.05(a)–(c), (e)–(h) (9th ed. Rev. 08.2017, Jan. 2018)) (“Step 2A, Prong Two”).⁵

2019 Revised Guidance 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, under Step 2B, to whether the claim:

- (2) 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 In response to received public comments, the Office issued further guidance on October 17, 2019, clarifying the 2019 Revised Guidance. USPTO, *October 2019 Update: Subject Matter Eligibility* (the “October 2019 Update”) (available at https://www.uspto.gov/sites/default/files/documents/peg_oct_2019_update.pdf).

⁵ This evaluation is performed by (a) identifying whether there are any additional elements recited in the claim beyond the judicial exception, and (b) evaluating those additional elements individually and in combination to determine whether the claim as a whole integrates the exception into a practical application. *See* 2019 Revised Guidance at 54–55.

- (3) simply appends well-understood, routine, conventional activities previously known to the industry, specified at a high level of generality, to the judicial exception.

2019 Revised Guidance at 52–56.

ANALYSIS

35 U.S.C. § 101 Rejection

The Examiner determines claims 1–2, 4–9, 11–15 and 17–20 are patent ineligible under 35 U.S.C. § 101. *See* Final Act. 4, 5; *Alice*, 573 U.S. at 217 (Describing the two-step framework “for distinguishing patents that claim laws of nature, natural phenomena, and abstract ideas from those that claim patent-eligible applications of those concepts.”).

Step 2A—Prongs 1 and 2 identified in the 2019 Revised Guidance Prong One

The Specification discloses:

[A] method for assigning various operations to an itinerary includes determining Gumbel distributions for time variances of the various operations based on time variances during past instances of the various operations. The time variances are variances from scheduled times for the various operations. The method also includes selecting a reliability factor. The method also includes determining time variances for the various operations, based on the determined Gumbel distributions and selected reliability factors for the various operations. The method also includes identifying a combination of operations from among the various operations wherein a sum of scheduled times for the combination of operations and the determined time variances for the combination of operations do not exceed a personal time limit of personnel. The method also includes assigning the identified combination of operations to an itinerary.

Specification ¶ 3.

Claim 1 recites a method for utilizing resources. Claim 1 recites determining statistical distributions of time variances based upon scheduled times for various operations and determining time variance buffers associated with at least one confidence interval in limitations [a], [b]. Claim 1 further recites associating the variance buffers with an aggregation identifier in limitation [c]. Claim 1 also recites determining an operation priority, as well as, selecting time variance buffers for operations based upon confidence intervals and aggregated time variance buffers in limitations [e], [f]. Claim 1 recites identifying a combination of operations wherein a sum of the operations' scheduled times and selected time variance buffers do not exceed the personal time limit of personnel in limitation [g].

The limitations comprise utilizing “[m]ental processes—concepts performed in the human mind (including an observation, evaluation, judgment, opinion),” and “[m]athematical concepts—mathematical relationships, mathematical formulas or equations, mathematical calculations.” *See* 2019 Revised Guidance Section I (Groupings of Abstract Ideas); *see also* Specification 3–5. Our reviewing courts have found claims to be directed to abstract ideas when they recited similar subject matter. *See Mackay Radio & Tel. Co. v. Radio Corp. of Am.*, 306 U.S. 86, 94 (1939) (“[A] scientific truth, or the mathematical expression of it, is not patentable invention.”); *see also SAP Am., Inc. v. InvestPic, LLC*, 898 F.3d 1161, 1163 (Fed. Cir. 2018) (holding that claims to a “series of mathematical calculations based on selected information” are directed to abstract ideas); *Digitech Image Techs., LLC v. Elecs. for Imaging, Inc.*, 758 F.3d 1344, 1350 (Fed. Cir. 2014) (holding that claims to a “process of organizing information through mathematical correlations” are directed to an abstract idea);

Bancorp Servs., L.L.C. v. Sun Life Assurance Co. of Can. (U.S.), 687 F.3d 1266, 1280 (Fed. Cir. 2012) (identifying the concept of “managing a stable value protected life insurance policy by performing calculations and manipulating the results” as an abstract idea). Therefore, we conclude the claims recite judicial exception pursuant to Step 2A, Prong One of the 2019 Revised Guidance.

Prong Two

Under Prong Two of the 2019 Revised Guidance we must determine “whether the claim as a whole integrates the recited judicial exception into a practical application of the exception.” 2019 Revised Guidance, Section III(A)(2). We note that a “claim that integrates a judicial exception into a practical application will 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.” 2019 Revised Guidance, Section III (A)(2).

Appellant argues, “the claims have already been found novel and non-obvious over the references of record. *See* Final Office Action at 8” and therefore the “claims reflect a novel and non-obvious technical solution to a technical problem, and are patent eligible.” Appeal Brief 12.

We note that a finding of novelty or non-obviousness does not require the conclusion that the claimed subject matter is patent-eligible. Although the second step in the *Mayo/Alice* framework is termed a search for an “inventive concept,” the analysis is not an evaluation of novelty or nonobviousness, but, rather, is 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. “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). A novel and nonobvious claim directed to a purely abstract idea is, nonetheless, patent ineligible. *See Mayo*, 566 U.S. at 90; *see also Diehr*, 450 U.S. at 188–89 (“The ‘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 [section] 101 categories of possibly patentable subject matter.”). Further, as the Federal Circuit has explained, a “claim for a *new* abstract idea is still an abstract idea.” *Synopsis, Inc. v. Mentor Graphics Corp.*, 839 F.3d 1138, 1151 (Fed. Cir. 2016).

Appellant contends:

[C]laim 1 states that “the time variance buffers are stored in aggregated form in the computer database” and “are associated with an aggregation identifier” that is used in “retrieving the aggregated time variance buffers from the computer database.” As taught in the specification, this is a technical improvement that can “reduce table search times” when searching a table in a computer database. Specification at [0068].

Appeal Brief 15.

We do not find Appellant’s argument persuasive because the Specification’s paragraph 68 is silent in regard to improvements to the claimed computer processor. Also, the technique disclosed in paragraph 68 of the Specification might reduce table search times, however the technique does not improve the processors or otherwise provide a technical benefit. *See* Appeal Brief 15. Rather, any alleged improvement to the method’s speed arises out of the conventional advantages of using the claimed

computing device as a tool, and not a particular improvement to the computing device itself. *See* Ans. 10; *Intellectual Ventures I LLC v. Capital One Bank (USA)*, 792 F.3d 1363, 1370 (Fed. Cir. 2015) (“[M]erely adding computer functionality to increase the speed or efficiency of the process does not confer patent eligibility on an otherwise abstract idea.”); *see* 2019 Revised Guidance at 55; *see also* *Trading Techs. Int’l, Inc. v. IBG LLC*, 921 F.3d 1084, 1090 (Fed. Cir. 2019) (“This invention makes the trader faster and more efficient, not the computer. This is not a technical solution to a technical problem.”).

Further, we find Appellant’s claims are distinguished from those claims that our reviewing court has found to be patent eligible by virtue of reciting technological improvements to a computer system because the claims merely employ processors and a database to implement the abstract idea wherein there is no improvement to the processors. *Cf., e.g., DDR Holdings, LLC v. Hotels.com, L.P.*, 773 F.3d 1245, 1249, 1257 (Fed. Cir. 2014) (Holding that claims reciting computer processor for serving “composite web page” were patent eligible because “the claimed solution is necessarily rooted in computer technology in order to overcome a problem specifically arising in the realm of computer networks.”); *Visual Memory LLC v. NVIDIA Corp.*, 867 F.3d 1253, 1259 (Fed. Cir. 2017) (holding that claims directed to “an improved computer memory system” having many benefits were patent eligible); *Enfish, LLC v. Microsoft Corp.*, 822 F.3d 1327, 1335–36 (Fed. Cir. 2016) (Distinguishing between “claims are directed to an improvement to computer functionality versus being directed to an abstract idea” or whether “the focus of the claims is on the specific asserted improvement in computer capabilities . . . or, instead, on a process

that qualifies as an ‘abstract idea’ for which computers are invoked merely as a tool.”); *see also Alice*, 573 U.S. at 222 (“In holding that the process was patent ineligible, we rejected the argument that ‘implement[ing] a principle in some specific fashion’ will ‘automatically fal[l] within the patentable subject matter of § 101.’”) (quoting *Parker v. Flook*, 437 U.S. 584, 593 (1978)).

We find claim 1 does not recite any improvement to the claimed computer processors or database, instead claim 1 only uses the computer system to manage duty times. *See* Specification ¶¶ 2–5. Additionally, we detect no additional element (or combination of elements) recited in Appellant’s representative claim 1 that integrates the judicial exception into a practical application. *See* 2019 Revised Guidance, Section III (A)(2). For example, Appellant’s claimed additional elements (e.g., computer processors, database) do not: (1) improve the functioning of a computer or other technology; (2) is not applied with any particular machine (except for generic devices); (3) does not effect a transformation of a particular article to a different state; and (4) is not applied in any meaningful way beyond generally linking the use of the judicial exception to a particular technological environment, such that the claim as a whole is more than a drafting effort designed to monopolize the exception. *See* MPEP §§ 2106.05(a)–(c), (e)–(h).

Accordingly, we determine the claim does not integrate the recited judicial exception into a practical application. *See* 2019 Revised Guidance, Section III(A)(2).

Step 2B identified in the 2019 Revised Guidance

In Step 2B, we need to consider whether an additional or combination of elements, “[a]dds a specific limitation or combination of limitations that are not well-understood, routine, conventional activity in the field, which is indicative that an inventive concept may be present” or “simply appends well-understood, routine, conventional activities previously known to the industry, specified at a high level of generality, to the judicial exception, which is indicative that an inventive concept may not be present.”

2019 Revised Guidance.

Appellant argues:

[T]he claims have already been found novel and nonobvious over the references of record. *See* Final Office Action at 8 (“Claims 1–2, 4–9, 11–15, and 17–20 would be allowable if rewritten or amended to overcome the rejections under 35 U.S.C. § 101 and Double Patenting, set forth in this Office action.”). This means, necessarily, that the claims include limitations that are not “well-understood, routine, and conventional to a skilled artisan at the time of the patent.”

Appeal Brief 16.

We do not find Appellant’s argument persuasive of Examiner error because, as we stated above, a finding of novelty or non-obviousness does not require the conclusion that the claimed subject matter is patent-eligible. *See Alice*, 573 U.S. at 217–18.

Appellant argues:

The claims recite use of a “computer database,” including storing and retrieving “time variance buffers” “in a computer database” “in aggregated form” using “an aggregation identifier.” These limitations “are not well-understood, routine, conventional activity [(WRC)] in the field, which is indicative that an

inventive concept may be present,” and therefore the claims are patent eligible.

Appeal Brief 19.

Appellant contends, “[t]hat is, the claims relate to use of a ‘computer database’-storing and retrieving ‘time variance buffers’ ‘in a computer database’ ‘in aggregated form’ using ‘an aggregation identifier’-not ‘storing two time variance buffers in a single text file.’ A computer database is not a text file.” Reply Brief 4.

The 2019 Revised Guidance states:

In accordance with existing guidance, an examiner’s conclusion that an additional element (or combination of elements) is well understood, routine, conventional activity must be supported with a factual determination. For more information concerning evaluation of well-understood, routine, conventional activity, *see* MPEP 2106.05(d), as modified by the USPTO *Berkheimer* Memorandum.

2019 Revised Guidance at 56 n.36 (Section III(B) (emphasis added)).

The *Berkheimer* Memorandum⁶ Section III(A) states when formulating rejections, “[i]n a step 2B analysis, an additional element (or combination of elements) is not well-understood, routine or conventional unless the examiner finds, and expressly supports a rejection in writing.” *Berkheimer* Memorandum 3. The *Berkheimer* Memorandum provides four

⁶ USPTO Commissioner for Patents Memorandum dated April 19, 2018, “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>.

criteria for the Examiner to utilize to provide support for the additional elements to be considered to be well-understood, routine or conventional.⁷

The Examiner determines that:

Appellant's Specification discloses that a general purpose computer may be used to implement the invention (Spec: ¶ 82), thereby supporting the Examiner's assertion that the recitation of a "computer-implemented method" and "by operation of one or more computer processors" (in the method claims), a processor and a memory containing a program that, when executed on the processors, performs a task (in the apparatus claims), and a computer program product comprising a non-transitory computer-readable storage medium storing code for execution by a processor, wherein the code, when executed by a processor, performs a task (in the article of manufacture claims) are simply examples of general processing elements used to apply the abstract idea at a high level of generality and they are mere tools to implement the abstract idea.

Answer 9.

The Examiner furthers recite to MPEP § 2106.05(d)(II) to support the determination that the additional elements in the claim are well-understood, routine or conventional. *See* Answer 9–11. Accordingly, we do not find Appellant's argument persuasive of Examiner error because, in determining if the additional elements (or combination of additional elements) represent

⁷ *Berkheimer* Memorandum at 3–4 (Section III(A)) ("1. A citation to an express statement in the specification or to a statement made by an applicant during prosecution that demonstrates the well-understood, routine, conventional nature of the additional element(s)[] 2. A citation to one or more of the court decisions discussed in MPEP § 2106.05(d)(II) as noting the well-understood, routine, conventional nature of the additional element(s)[] 3. A citation to a publication that demonstrates the well-understood, routine, conventional nature of the additional element(s) []4. A statement that the examiner is taking official notice of the well-understood, routine, conventional nature of the additional element(s).").

well-understood, routine, conventional activity, the Examiner supported the determination based upon a factual determination as specified in the *Berkheimer* Memorandum. *See Berkheimer* Memorandum at 3–4 (Section III(A)(1), (2)).

Further in *Bascom*, our reviewing court found that while the claims of the patent were directed to an abstract idea, the patentee alleged an “inventive concept can be found in the ordered combination of the claim limitations that transform the abstract idea of filtering content into a particular, practical application of that abstract idea.” *Bascom Global Internet Services, Inc., v. AT&T Mobility LLC* 827 F.3d 1341, 1352 (Fed. Cir. 2016). In particular, the patent in *Bascom* claimed “a technology-based solution (not an abstract-idea-based solution implemented with generic technical components in a conventional way) to filter content on the Internet that overcomes existing problems with other Internet filtering systems.” *Bascom* at 1351.

Claim 1 is distinguishable, as it recites an abstract-idea-based solution, that is, a method of scheduling personnel with generic technical components (e.g., computer processor, software, database), in a conventional way. *See generally* Specification. Therefore, we are not persuaded that ordered combination of limitations in representative claim 1 provides an inventive concept, and we find the claims simply appends a well-understood, routine and conventional activity to the judicial exception. *See* 2019 Revised Guidance at 56.

Accordingly, we conclude claims 1–2, 4–9, 11–15 and 17–20 are directed to mathematical concepts such as mathematical relationships, mathematical formulas or equations, mathematical calculations as identified

in the Memorandum and thus are directed to a judicial exception. *See* 2019 Revised Guidance, Section I (Groupings of Abstract Ideas). We affirm the Examiner’s 35 U.S.C. § 101 rejection of claims 1–2, 4–9, 11–15 and 17–20.

Double Patenting Rejection

Appellant “acknowledges the double patenting rejection and respectfully requests that the rejection be held in abeyance because no claim in the present application is currently allowable.” Appeal Brief 20.

Appellant may not request that the nonstatutory double patenting rejection of claims 1–2, 4–9, 11–15 and 17–20 be held in abeyance.⁸ Accordingly, we sustain the Examiner’s nonstatutory double patenting rejection of claims 1–2, 4–9, 11–15 and 17–20.

CONCLUSION

Claims Rejected	35 U.S.C. §	Reference(s)/Basis	Affirmed	Reversed
1–2, 4–9, 11–15, 17– 20		Obviousness-Type Double Patenting	1–2, 4–9, 11–15, 17– 20	
1–2, 4–9, 11–15, 17– 20	101	Judicial Exception	1–2, 4–9, 11–15, 17– 20	

⁸ The arguments of appellant with respect to each ground of rejection, and the basis therefor, with citations of the statutes, regulations, authorities, and parts of the Record relied on. The arguments shall explain why the examiner erred as to each ground of rejection contested by appellant. Except as provided for in 35 U.S.C. §§ 41.41, 41.47 and 41.52, any arguments or authorities not included in the Appeal Brief will be refused consideration by the Board for purposes of the present Appeal. 37 C.F.R. § 41.37(c)(1)(iv).

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Overall Outcome			1-2, 4-9, 11-15, 17- 20	
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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). *See* 37 C.F.R. § 1.136(a)(1)(v).

AFFIRMED