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BEFORE THE PATENT TRIAL AND APPEAL BOARD

Ex parte WILLIAM LOO, STEPHEN HUGHES, JAMES GILLEPSIE,
JENNIFER A. BRANDMAIER, and DANIEL KOZA

Appeal 2018-006818
Application 13/652,010
Technology Center 3600

Before ST. JOHN COURTENAY III, LARRY J. HUME, and
PHILLIP BENNETT, *Administrative Patent Judges*.

HUME, *Administrative Patent Judge*.

DECISION ON APPEAL

Pursuant to 35 U.S.C. § 134(a), Appellant,¹ appeals from the Examiner's decision rejecting claims 1, 2, 4, 5, 7, 12, 22, 23, 27–29, 31–33, and 36–41, which are all claims pending in the application. Appellant has canceled claims 3, 6, 8–11, 13–21, 24–26, and 30. Final Act. 2. We have jurisdiction under 35 U.S.C. § 6(b).

We AFFIRM.

¹ We use the word “Appellant” to refer to “Applicants” as defined in 37 C.F.R. § 1.42(a). Appellant identifies the real party in interest as Allstate Insurance Company. App. Br. 2.

STATEMENT OF THE CASE²

The Invention

The claims are directed to vehicle financing. *See* Title. In particular, Appellant’s disclosed embodiments and claimed invention relate to vehicle financing decisions. Spec. ¶ 3.

Exemplary Claim

Claim 1, reproduced below, is representative of the subject matter on appeal:

1. A vehicle financing system comprising:
 - a mobile computing device comprising a first processor, a memory unit, a wireless communications interface, and a digital camera, configured to:
 - receive first vehicle operation data collected by first on-board vehicle sensors of a first vehicle;
 - capture a digital image of the first vehicle;
 - analyze the digital image to determine a vehicle identification number (VIN) based on the digital image;
 - and
 - transmit the determined VIN and first vehicle operation data to a vehicle financing server; and the vehicle financing server comprising a second processor and computer-executable instructions in a memory unit, the vehicle financing server configured to:

² Our decision relies upon Appellant’s Appeal Brief (“App. Br.,” filed Dec. 20, 2017); Reply Brief (“Reply Br.,” filed June 18, 2018); Examiner’s Answer (“Ans.,” mailed April 19, 2018); Final Office Action (“Final Act.,” mailed July 27, 2017); and the original Specification (“Spec.,” filed Oct. 15, 2012).

receive the VIN and the first vehicle operation data from the mobile computing device;

calculate, based on the first vehicle operation data, an estimated fuel usage for the first vehicle;

retrieve second vehicle operation data collected by second on-board vehicle sensors of a second vehicle associated with a potential purchaser of the first vehicle;

determine, based on the second vehicle operation data, a value indicative of driving habits of the potential purchaser of the first vehicle;

modify, based on the value indicative of driving habits of the potential purchaser, the estimated fuel usage for the first vehicle;

calculate a plurality of loan parameters based at least in part on the first vehicle operation data and the modified estimated fuel usage; and

transmit an indication of the plurality of loan parameters to the mobile computing device.

Rejection on Appeal

Claims 1, 2, 4, 5, 7, 12, 22, 23, 27–29, 31–33, and 36–41 stand rejected under 35 U.S.C. § 101 as being directed to patent-ineligible subject matter. Final Act. 3.

CLAIM GROUPING

Based on Appellant's arguments (App. Br. 15–21) and our discretion under 37 C.F.R. § 41.37(c)(1)(iv), we decide the appeal of the patent-ineligible subject matter rejection of claims 1, 2, 4, 5, 7, 12, 22, 23, 27–29, 31–33, and 36–41 on the basis of representative claim 1.

ISSUE

Appellant argues (App. Br. 15–21; Reply Br. 2–6) the Examiner’s rejection of claim 1 under 35 U.S.C. § 101 as being directed to patent-ineligible subject matter is in error. These contentions present us with the following issue:

Under the USPTO’s Revised Guidance, informed by our governing case law concerning 35 U.S.C. § 101, is claim 1 patent-ineligible under § 101?

PRINCIPLES OF LAW

A. 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. § 101.³ However, the Supreme Court has long interpreted 35 U.S.C. § 101 to include implicit exceptions: “[l]aws of nature, natural phenomena, and abstract ideas” are not patentable. *Mayo Collaborative Servs. v. Prometheus Labs., Inc.*, 566 U.S. 66, 70 (2012) (brackets in original) (citing *Diamond v. Diehr*, 450 U.S. 175, 185 (1981)).

In determining whether a claim falls within an excluded category, we are guided by the Supreme Court’s two-step framework, described in *Mayo* and *Alice*. *Alice Corp. v. CLS Bank Int’l*, 573 U.S. 208, 217–18 (2014) (citing *Mayo*, 566 U.S. at 75–77). In accordance with that framework, we

³ This threshold analysis of whether a claim is directed to one of the four statutory categories of invention, i.e., a process, machine, manufacture, or composition of matter, is referred to as “*Step 1*” in the USPTO’s patent-eligibility analysis under § 101. MPEP § 2106.

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” (*Diehr*, 450 U.S. at 191); “tanning, dyeing, making water-proof cloth, vulcanizing India rubber, smelting ores” (*id.* at 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 Supreme Court held “[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; *see also id.* at 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 Supreme 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.* (citation omitted) (citing *Benson* and *Flook*); *see, e.g., id.* at 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.”).

Abstract ideas may include, but are not limited to, fundamental economic practices, methods of organizing human activities, and mathematical formulas or relationships. *Alice*, 573 U.S. at 217–21. Under this guidance, we must therefore ensure at step one that we articulate what the claims are directed to with enough specificity to ensure the step one inquiry is meaningful. *Id.* at 217 (“[W]e tread carefully in construing this exclusionary principle lest it swallow all of patent law.”).

If the claim is “directed to” an abstract idea, we turn to the second step of the *Alice* and *Mayo* framework, where “we must examine the elements of the claim to determine whether it contains an ‘inventive concept’ sufficient to ‘transform’ the claimed abstract idea into a patent-eligible application.” *Alice*, 573 U.S. at 221 (citation 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.* (alterations in original) (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 Revised Guidance

The PTO recently published revised guidance in the Federal Register concerning the application of § 101. *2019 Revised Patent Subject Matter*

Eligibility Guidance, 84 Fed. Reg. 50 (January 7, 2019) (hereinafter “Revised Guidance”) (<https://www.govinfo.gov/content/pkg/FR-2019-01-07/pdf/2018-28282.pdf>).

Under the Revised Guidance, we first look to whether the claim recites:

(1) any judicial exceptions, including certain groupings of abstract ideas (i.e., mathematical concepts, certain methods of organizing human activity such as a fundamental economic practice, or mental processes);⁴ and

(2) additional elements that integrate the judicial exception into a practical application (*see* Manual for Patent Examining Procedure (“MPEP”) §§ 2106.05(a)–(c), (e)–(h)).⁵

See Revised Guidance 52–53.

Only if a claim (1) recites a judicial exception and (2) does not integrate that exception into a practical application, do we then look to whether the claim:

(3) adds a specific limitation beyond the judicial exception that is not “well-understood, routine, conventional” in the field (*see* MPEP § 2106.05(d)); or

(4) simply appends well-understood, routine, conventional activities previously known to the industry, specified at a high level of generality, to the judicial exception.⁶

See Revised Guidance 56.

⁴ Referred to as “*Revised Step 2A, Prong 1*” in the Revised Guidance (hereinafter “*Step 2A(i)*”).

⁵ Referred to as “*Revised Step 2A, Prong 2*” in the Revised Guidance (hereinafter “*Step 2A(ii)*”).

⁶ Items (3) and (4) continue to be collectively referred to as “*Step 2B*” of the Supreme Court’s two-step framework, described in *Mayo* and *Alice*.

Step 2A(i) – Abstract Idea

Informed by our judicial precedent, the Revised Guidance extracts and synthesizes key concepts identified by the courts as abstract ideas to explain that the abstract idea exception includes the following groupings of subject matter, when recited as such in a claim limitation:

(a) Mathematical concepts—mathematical relationships, mathematical formulas or equations, mathematical calculations;

(b) Certain methods of organizing human activity — fundamental economic principles or practices (including hedging, insurance, mitigating risk); commercial or legal interactions (including agreements in the form of contracts; legal obligations; advertising, marketing or sales activities or behaviors; business relations); managing personal behavior or relationships or interactions between people (including social activities, teaching, and following rules or instructions); and

(c) Mental processes—concepts performed in the human mind (including an observation, evaluation, judgment, opinion).

Under the Revised Guidance, if the claim does not recite a judicial exception (a law of nature, natural phenomenon, or subject matter within the enumerated groupings of abstract ideas above), then the claim is patent-eligible at *Step 2A(i)*. This determination concludes the eligibility analysis, except in situations identified in the Revised Guidance.⁷

However, if the claim recites a judicial exception (i.e., an abstract idea enumerated above, a law of nature, or a natural phenomenon), the claim

⁷ In the rare circumstance in which an examiner believes a claim limitation that does not fall within the enumerated groupings of abstract ideas should nonetheless be treated as reciting an abstract idea, the procedure described in of the Guidance for analyzing the claim should be followed. *See* Revised Guidance, Section III.C.

requires further analysis for a practical application of the judicial exception in *Step 2A(ii)*.

*Step 2A(ii) – Integration of the Judicial Exception into
A Practical Application*

If a claim recites a judicial exception in *Step 2A(i)*, we determine whether the recited judicial exception is integrated into a practical application of that exception in *Step 2A(ii)* by: (a) identifying whether there are any additional elements recited in the claim beyond the judicial exception(s); and (b) evaluating those additional elements individually and in combination to determine whether they integrate the exception into a practical application.

The seven identified “practical application” sections of the MPEP,⁸ cited in the Revised Guidance under *Step 2A(ii)*, are:

- (1) MPEP § 2106.05(a) Improvements to the Functioning of a Computer or To Any Other Technology or Technical Field
- (2) MPEP § 2106.05(b) Particular Machine
- (3) MPEP § 2106.05(c) Particular Transformation
- (4) MPEP § 2106.05(e) Other Meaningful Limitations
- (5) MPEP § 2106.05(f) Mere Instructions To Apply An Exception
- (6) MPEP § 2106.05(g) Insignificant Extra-Solution Activity

⁸ See MPEP §§ 2106.05(a)–(c), (e)–(h). Citations to the MPEP herein refer to revision [R-08.2017]. Sections 2106.05(a), (b), (c), and (e) are indicative of integration into a practical application, while §§ 2106.05(f), (g), and (h) relate to limitations that are not indicative of integration into a practical application.

(7) MPEP § 2106.05(h) Field of Use and Technological Environment

See Revised Guidance 55.

If the recited judicial exception is integrated into a practical application as determined under one or more of the MPEP sections cited above, then the claim is not directed to the judicial exception, and the patent-eligibility inquiry ends. *See Revised Guidance 54.* If not, then analysis proceeds to *Step 2B*.

Step 2B – “Inventive Concept” or “Significantly More”

Under our reviewing courts’ precedent, it is possible that a claim that does not “integrate” a recited judicial exception under *Step 2A(ii)* is nonetheless patent eligible. For example, the claim may recite additional elements that render the claim patent eligible even though a judicial exception is recited in a separate claim element.⁹ The Federal Circuit has held claims eligible at the second step of the *Alice/Mayo* test (USPTO *Step 2B*) because the additional elements recited in the claims provided “significantly more” than the recited judicial exception (e.g., because the additional elements were unconventional in combination).¹⁰ Therefore, if a claim has been determined to be directed to a judicial exception under *Revised Step 2A*, we must also evaluate the additional elements individually and in combination under *Step 2B* to determine whether they provide an

⁹ *See, e.g., Diehr*, 450 U.S. at 187.

¹⁰ *See, e.g., Amdocs (Israel), Ltd. v. Openet Telecom, Inc.*, 841 F.3d 1288, 1300, 1304 (Fed. Cir. 2016); *BASCOM Global Internet Services, Inc. v. AT&T Mobility LLC*, 827 F.3d 1341, 1349–52 (Fed. Cir. 2016); *DDR Holdings v. Hotels.com, L.P.*, 773 F.3d 1245, 1257–59 (Fed. Cir. 2014).

inventive concept (i.e., whether the additional elements amount to significantly more than the exception itself).¹¹

Under the Revised Guidance, we must consider in *Step 2B* whether an additional element or combination of elements: (1) “Adds 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 (2) “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.” *See* Revised Guidance, III.B.¹²

In the *Step 2B* analysis, an additional element (or combination of elements) is not well-understood, routine or conventional unless the

¹¹ The patent eligibility inquiry may contain underlying issues of fact. *Mortg. Grader, Inc. v. First Choice Loan Servs. Inc.*, 811 F.3d 1314, 1325 (Fed. Cir. 2016). In particular, “[t]he question of whether a claim element or combination of elements is well-understood, routine and conventional to a skilled artisan in the relevant field is a question of fact.” *Berkheimer v. HP Inc.*, 881 F.3d 1360, 1368 (Fed. Cir. 2018).

¹² In accordance with existing *Step 2B* guidance, an Examiner’s finding that an additional element (or combination of elements) is well understood, routine, conventional activity must be supported with at least one of the four specific types of evidence required by the USPTO *Berkheimer* Memorandum, as shown above. For more information concerning evaluation of well-understood, routine, conventional activity, *see* MPEP § 2106.05(d), as modified by the USPTO *Berkheimer* Memorandum (USPTO Commissioner for Patents Memorandum dated Apr. 19, 2018, “Changes in Examination Procedure Pertaining to Subject Matter Eligibility, Recent Subject Matter Eligibility Decision (*Berkheimer v. HP, Inc.*)” (hereinafter “*Berkheimer Memo*”).

examiner finds an evidentiary basis, and expressly supports a rejection in writing with, one or more of the following:

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). . . .

See Berkheimer Memo.

The analysis in *Step 2B* further determines whether an additional element or combination of elements:

- (a) Adds 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
- (b) 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.

Revised Guidance, *and see Berkheimer Memo.*

If the Examiner or the Board determines under *Step 2B* that the element (or combination of elements) amounts to significantly more than the

exception itself, the claim is eligible, thereby concluding the eligibility analysis.

However, if a determination is made that the element and combination of elements does not amount to significantly more than the exception itself, the claim is ineligible under *Step 2B*, and the claim should be rejected for lack of subject matter eligibility.

ANALYSIS

Step 1 – Statutory Category

Claim 1, as a system claim, recites one of the enumerated categories of eligible subject matter in 35 U.S.C. § 101. Therefore, the issue before us is whether it is directed to a judicial exception without significantly more.

Step 2A(i): Does the Claim Recite a Judicial Exception?

The Examiner determined that claim 1 is directed to “fundamental economic practice, an idea of itself, and certain methods of organizing human activities.” Final Act. 3.

We conclude claim 1 does not recite the judicial exceptions of either natural phenomena or laws of nature. We evaluate, *de novo*, whether claim 1 recites an abstract idea based upon the Revised Guidance.

First, we look to the Specification to provide context as to what the claimed invention is directed to. In this case, the Specification discloses that the invention relates to “determining vehicle financing decisions.” Spec. ¶ 3.

Appellant’s Abstract describes the invention as:

Financing determinations for sale and purchase transactions of vehicles may be performed based on buyer financial data, vehicle sale price, and additional vehicle-specific data, for example, vehicle insurance records, maintenance records, and vehicle operation sensor data. Additional data for performing financing determinations may include data corresponding to the prospective buyer and/or seller of the vehicle, for example, insurance records, maintenance records, or vehicle sensor data for other vehicles associated with the prospective buyer or seller.

Spec. 44.

In TABLE ONE below, we identify in *italics* the specific claim limitations that we conclude recite an abstract idea. We additionally identify in **bold** the additional (non-abstract) claim limitations that are generic computer components and techniques or persons:

TABLE ONE

Independent Claim 1	Revised Guidance
A vehicle financing system comprising:	A system is a statutory subject matter class. <i>See</i> 35 U.S.C. § 101.
a mobile computing device comprising a first processor, a memory unit, a wireless communications interface, and a digital camera	Generic computer components. <i>See</i> Spec. pars. 13–16, 20–22.
receive first vehicle operation data collected by first on-board vehicle sensors of a first vehicle;	Receiving information, i.e., data gathering, is insignificant extra-resolution activity. Revised Guidance 55, n.31; <i>see also</i> MPEP § 2106.05(g).
capture a digital image of the first vehicle	Capturing a digital image, i.e., data gathering, is insignificant extra-

Independent Claim 1	Revised Guidance
	solution activity. Revised Guidance 55, n.31; <i>see also</i> MPEP § 2106.05(g).
<i>analyze</i> the digital image to determine a vehicle identification number (VIN) based on the digital image;	Abstract idea, i.e., “analyze” could be performed alternatively as a mental process. <i>See</i> Revised Guidance 52.
transmit the determined VIN and first vehicle operation data to a vehicle financing server ;	Transmitting data is insignificant extra-solution activity. Revised Guidance 55, n.31; <i>see also</i> MPEP § 2106.05(g).
the vehicle financing server comprising a second processor and computer-executable instructions in a memory unit , the vehicle financing server configured to:	Generic computer components. <i>See</i> Spec. 13–16, 22.
receive the VIN and the first vehicle operation data from the mobile computing device ;	Receiving information, i.e., data gathering, is insignificant extra-solution activity. Revised Guidance 55, n.31; <i>see also</i> MPEP § 2106.05(g).
<i>calculate</i> , based on the first vehicle operation data, an estimated fuel usage for the first vehicle;	Abstract idea, i.e., “Mathematical Concepts,” e.g., “mathematical calculations.” <i>See</i> Revised Guidance 52.
retrieve second vehicle operation data collected by second on-board vehicle sensors of a second vehicle associated with a potential purchaser of the first vehicle ;	Receiving information, i.e., data gathering, is insignificant extra-solution activity. Revised Guidance 55, n.31; <i>see also</i> MPEP § 2106.05(g).
<i>determine</i> , based on the second vehicle operation data, a value indicative of driving habits of	Abstract idea, which could be performed alternatively as a “Mental Process”, e.g., “concepts performed in the human mind (including an

Independent Claim 1	Revised Guidance
the potential purchaser of the first vehicle	observation, evaluation, judgment, opinion).” <i>See</i> Revised Guidance 52.
<i>modify</i> , based on the value indicative of driving habits of the potential purchaser, the estimated fuel usage for the first vehicle;	Abstract idea, which could be performed alternatively as a “Mental Process”, e.g., “concepts performed in the human mind (including an observation, evaluation, judgment, opinion).” <i>See</i> Revised Guidance 52.
<i>calculate</i> a plurality of loan parameters based at least in part on the first vehicle operation data and the modified estimated fuel usage;	Abstract idea, i.e., “Mathematical Concepts,” e.g., “mathematical calculations.” <i>See</i> Revised Guidance 52.
transmit an indication of the plurality of loan parameters to the mobile computing device.	Transmitting information for display is insignificant post-solution activity. Revised Guidance 55, n.31; <i>see also</i> MPEP § 2106.05(g); <i>and see buySAFE, Inc. v. Google, Inc.</i> , 765 F.3d 1350, 1355 (Fed. Cir. 2014) (computer receives and sends information over a network).

Claims App’x.

We conclude the claimed invention, when viewed as a whole, recites certain method of organizing human activity, i.e., fundamental economic practices (mitigating risk of a financial transaction). *Bancorp Servs., LLC v. Sun Life Assurance Co. of Can. (U.S.)*, 687 F.3d 1266, 1280 (Fed. Cir. 2012), (concluding that “managing a stable value protected life insurance policy by performing calculations and manipulating the results” is an abstract idea).

This type of activity, i.e., calculating and evaluating vehicle financing loan parameters, as recited by the combination of limitations, and aside from

any computer-related aspects, e.g., the recited “mobile computing device,” includes longstanding conduct that existed well before the advent of computers and the Internet, and could be carried out by a human with pen and paper. *See CyberSource Corp. v. Retail Decisions, Inc.*, 654 F.3d 1366, 1375 (Fed. Cir. 2011).¹³

Under the broadest reasonable interpretation standard,¹⁴ we conclude each of the limitations recite features that may be utilized when engaged in the fundamental economic practice of vehicle financing and calculating loan parameters for vehicle financing.

¹³ Our reviewing court recognizes that “[a]n abstract idea can generally be described at different levels of abstraction.” *Apple, Inc. v. Ameranth, Inc.*, 842 F.3d 1229, 1240 (Fed. Cir. 2016). That need not and, in this case does not, “impact the patentability analysis.” *Id.* at 1241. Further, “[t]he Board’s slight revision of its abstract idea analysis does not impact the patentability analysis.” *Id.* Moreover, merely combining several abstract ideas does not render the combination any less abstract. *RecogniCorp, LLC v. Nintendo Co.*, 855 F.3d 1322, 1327 (Fed. Cir. 2017) (“Adding one abstract idea (math) to another abstract idea . . . does not render the claim non-abstract.”); *see also FairWarning IP, LLC v. Iatric Sys., Inc.*, 839 F.3d 1089, 1093–94 (Fed. Cir. 2016) (determining the pending claims were directed to a combination of abstract ideas).

¹⁴ During prosecution, claims must be given their broadest reasonable interpretation when reading claim language in light of the specification as it would be interpreted by one of ordinary skill in the art. *In re Am. Acad. of Sci. Tech. Ctr.*, 367 F.3d 1359, 1364 (Fed. Cir. 2004). Under this standard, we interpret claim terms using “the broadest reasonable meaning of the words in their ordinary usage as they would be understood by one of ordinary skill in the art, taking into account whatever enlightenment by way of definitions or otherwise that may be afforded by the written description contained in the applicant’s specification.” *In re Morris*, 127 F.3d 1048, 1054 (Fed. Cir. 1997).

Thus, under *Step 2A(i)*, we agree with the Examiner that claim 1’s *vehicle financing system* recites a judicial exception. We conclude claim 1, under our Revised Guidance, recites certain methods of organizing human activity, i.e., a fundamental economic practice, including mitigating financial risk, and thus is an abstract idea.

Step 2A(ii): Judicial Exception Integrated into a Practical Application?

If the claims are directed to a patent-ineligible concept, as we conclude above, we proceed to the “practical application” *Step 2A(ii)* in which we determine whether the recited judicial exception is integrated into a practical application of that exception by: (a) identifying whether there are any additional elements recited in the claim beyond the judicial exception(s); and (b) evaluating those additional elements individually and in combination to determine whether they integrate the exception into a practical application.

As to the specific limitations, we find limitations including “receive first vehicle operation data,” “capture a digital image,” “receive the VIN and the first vehicle operation data,” recite insignificant data gathering. *See* MPEP § 2106.05(g). Data gathering, as performed by the functions in Appellant’s claims, is a classic example of insignificant extra-solution activity. *See, e.g., In re Bilski*, 545 F.3d 943, 963 (Fed. Cir. 2008) (en banc), *aff’d sub nom, Bilski v. Kappos*, 561 U.S. 593 (2010).

We also find limitations “transmit the determined VIN and first vehicle data,” and “transmit an indication of the plurality of loan

parameters” recite insignificant post solution activity.¹⁵ The Supreme Court guides that the “prohibition against patenting abstract ideas ‘cannot be circumvented’ [by] adding ‘insignificant postsolution activity.’” *Bilski*, 561 U.S. at 610–11 (quoting *Diehr*, 450 U.S. at 191–92). On this record, we are of the view that Appellant’s claims do not operate the recited generic computer components in an unconventional manner to achieve an improvement in computer functionality. *See* MPEP § 2106.05(a).

We find each of the italicized limitations of claim 1 above recite abstract ideas as identified in *Step 2A(i)*, *supra*, and none of the additional limitations of claim 1 integrate the judicial exception of vehicle financing into a practical application as determined under one or more of the MPEP sections cited above. The claim as a whole merely uses instructions to implement the abstract idea on a computer or, alternatively, merely uses a computer as a tool to perform the abstract idea.

Under analogous circumstances, the Federal Circuit has held that “[t]his is a quintessential ‘do it on a computer’ patent: it acknowledges that [such] data . . . 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.” *Univ. of Fla. Research Found., Inc. v. Gen. Elec. Co.*, 916 F.3d 1363, 1367 (Fed. Cir. 2019); *see also Elec. Power Grp., LLC v. Alstom S.A.*, 830 F.3d 1350, 1351 (Fed. Cir. 2016) (“Though lengthy and numerous, the claims do not go beyond requiring the collection, analysis, and display of available information in a

¹⁵ We also note the “determining” and “calculating” limitations can be carried out by a human in the mind or by use of pen and paper. *See CyberSource*, 654 F.3d at 1375.

particular field, stating those functions in general terms, without limiting them to technical means for performing the functions that are arguably an advance over conventional computer and network technology.”).

Therefore, the claim as a whole merely uses instructions to implement the abstract idea on a computer or, alternatively, merely uses a computer as a tool to perform the abstract idea. Thus, on this record, Appellant has not shown an improvement or practical application under the guidance of Manual of Patent Examining Procedure section 2106.05(a) (“Improvements to the Functioning of a Computer or to Any Other Technology or Technical Field”) or section 2106.05(e) (“Other Meaningful Limitations”). Nor does Appellant advance any arguments in the Brief(s) that are directed to the *Bilski* machine-or-transformation test, which would only be applicable to the method (process) claims on appeal. See MPEP §§ 2106.05(b) (Particular Machine) and 2106.05(c) (Particular Transformation).

Therefore, we conclude the abstract idea is not integrated into a practical application, and thus the claim is directed to the judicial exception.

Step 2B – “Inventive Concept” or “Significantly More”

If the claims are directed to a patent-ineligible concept, as we conclude above, we proceed to the “inventive concept” step. For *Step 2B* we must “look with more specificity at what the claim elements add, in order to determine ‘whether they identify an ‘inventive concept’ in the application of the ineligible subject matter’ to which the claim is directed.” *Affinity Labs of Texas, LLC v. DIRECTV, LLC*, 838 F.3d 1253, 1258 (Fed. Cir. 2016) (quoting *Elec. Power Grp., LLC v. Alstom S.A.*, 830 F.3d 1350, 1353 (Fed. Cir. 2016)).

In applying step two of the *Alice* analysis, our reviewing court guides we must “determine whether the claims do significantly more than simply describe [the] abstract method” and thus transform the abstract idea into patent-eligible subject matter. *Ulramercial, Inc. v. Hulu, LLC*, 772 F.3d 709, 715 (Fed. Cir. 2014). We look to see whether there are any “additional features” in the claims that constitute an “inventive concept,” thereby rendering the claims eligible for patenting even if they are directed to an abstract idea. *Alice*, 573 U.S. at 221. Those “additional features” must be more than “well-understood, routine, conventional activity.” *Mayo*, 566 U.S. at 79.

Limitations referenced in *Alice* that are not enough to qualify as “significantly more” when recited in a claim with an abstract idea include, as non-limiting or non-exclusive examples: adding the words “apply it” (or an equivalent) with an abstract idea¹⁶; mere instructions to implement an abstract idea on a computer¹⁷; or requiring no more than a generic computer to perform generic computer functions that are well-understood, routine and conventional activities previously known to the industry.¹⁸

Evaluating representative claim 1 under step 2 of the *Alice* analysis, we conclude it lacks an inventive concept that transforms the abstract idea of vehicle financing into a patent-eligible application of that abstract idea.

¹⁶ *Alice*, 573 U.S. at 221–23.

¹⁷ *Alice*, 573 U.S. at 221, *e.g.*, simply implementing a mathematical principle on a physical machine, namely a computer (citing *Mayo*, 566 U.S. at 84–85).

¹⁸ *Alice*, 573 U.S. at 225, *e.g.*, using a computer to obtain data, adjust account balances, and issue automated instructions.

The patent eligibility inquiry may contain underlying issues of fact. *Mortg. Grader*, 811 F.3d at 1325. In particular, “[t]he question of whether a claim element or combination of elements is well-understood, routine and conventional to a skilled artisan in the relevant field is a question of fact.” *Berkheimer*, 881 F.3d at 1368.

Appellants contend the Examiner erred by not providing a supported explanation, as required by our reviewing court’s holding in *Berkheimer*, of “why the claimed invention is not ‘significantly more’ than any alleged abstract idea under step 2 of the *Mayo/Alice* eligibility test. Instead, they rely on the unsupported assertions that the additional elements ‘are generic computer functions *routinely* used in computer applications’ (emphasis added) and ‘are *well-understood, routine, and conventional activities* [that] amount to no more than implementing the abstract idea with a computerized system,” Reply Br. 2 (citing Ans. 8).

As evidence of the conventional nature of the recited “mobile computing device,” “processor,” “memory unit,” “wireless communications interface,” “digital camera,” “vehicle sensors of a vehicle,” and “vehicle financing server” in system claim 1, the Specification discloses these as generic components. See Spec. ¶¶ 13,–16, 20–22, Fig. 2. For example, “any suitable computer readable storage media may be utilized” (Spec. ¶ 13), and “[t]he device 101 may have a processor 103 for controlling overall operation of the device 101 and its associated components, including RAM 105, ROM 107, input/output module 109, and memory 115.” Spec. ¶ 14.

Thus, because the Specification describes the additional elements in general terms, without describing the particulars, we conclude the claim

limitations may be broadly but reasonably construed as reciting conventional computer components and techniques, particularly in light of Appellant's Specification, as identified above.¹⁹

The Manual of Patent Examining Procedure, based upon our precedential guidance, provides additional considerations with respect to analysis of the well-understood, routine, and conventional nature of the claimed computer-related components.

Another consideration when determining whether a claim recites significantly more than a judicial exception is whether the additional elements amount to more than a recitation of the words “apply it” (or an equivalent) or are more than mere instructions to implement an abstract idea or other exception on a computer. As explained by the Supreme Court, in order to transform a judicial exception into a patent-eligible application, the additional element or combination of elements must do “more than simply stat[e] the [judicial exception] while adding the words ‘apply it’”. *Alice Corp. v. CLS Bank*, 573 U.S. ___, 134 S. Ct. 2347, 2357, 110 USPQ2d 1976, 1982-83 (2014) (quoting *Mayo Collaborative Servs. v. Prometheus Labs., Inc.*, 566 U.S. 66, 72, 101 USPQ2d 1961, 1965). Thus, for example, claims that amount to nothing more than an instruction to apply the abstract idea using a generic computer do not render an abstract idea eligible. *Alice Corp.*, 134 S. Ct. at 2358, 110 USPQ2d at 1983. *See also* 134 S. Ct. at 2389, 110 USPQ2d at 1984 (warning against a § 101 analysis that turns on “the draftsman’s art”)

In *Alice Corp.*, the claim recited the concept of intermediated settlement as performed by a generic computer. The Court found that the recitation of the computer in the claim

¹⁹ Claim terms are to be given their broadest reasonable interpretation, as understood by those of ordinary skill in the art and taking into account whatever enlightenment may be had from the Specification. *In re Morris*, 127 F.3d 1048, 1054 (Fed. Cir. 1997).

amounted to mere instructions to apply the abstract idea on a generic computer. 134 S. Ct. at 2359-60, 110 USPQ2d at 1984. The Supreme Court also discussed this concept in an earlier case, *Gottschalk v. Benson*, 409 U.S. 63, 70, 175 USPQ 673, 676 (1972), where the claim recited a process for converting binary-coded decimal (BCD) numerals into pure binary numbers. The Court found that the claimed process had no substantial practical application except in connection with a computer. *Benson*, 409 U.S. at 71-72, 175 USPQ at 676. The claim simply stated a judicial exception (e.g., law of nature or abstract idea) while effectively adding words that “apply it” in a computer. *Id.*

MPEP § 2106.05(f) (“Mere Instructions To Apply An Exception”).

With respect to the *Step 2B* analysis, we conclude, similar to *Alice*, the recitation of a system to determine vehicle financing that includes a “mobile computing device,” “processor,” “memory unit,” “wireless communications interface,” “digital camera,” “vehicle sensors of a vehicle,” and “vehicle financing server” (claim 1) as argued by Appellant, and similarly for claims 7, 27 and 33, is simply not enough to transform the patent-ineligible abstract idea here into a patent-eligible invention under *Step 2B*. See *Alice*, 573 U.S. at 221 (“[C]laims, which merely require generic computer implementation, fail to transform [an] abstract idea into a patent-eligible invention.”).

We conclude the claims fail the *Step 2B* analysis because claim 1, in essence, merely recites various computer-based elements along with no more than mere instructions to implement the identified abstract idea and data collection using the computer-based elements.

Therefore, in light of the foregoing, we conclude, under the Revised Guidance, that Appellant’s claim 1, considered as a whole, is directed to a

patent-ineligible abstract idea that is not integrated into a practical application and does not include an inventive concept. Accordingly, we sustain the Examiner's § 101 rejection of independent claim 1, and grouped claims 2, 4, 5, 7, 12, 22, 23, 27–29, 31–33, and 36–41 which fall therewith. *See Claim Grouping, supra.*

CONCLUSION

Under our Revised Guidance, governed by relevant case law, we conclude all claims in the rejection under 35 U.S.C. § 101 are directed to patent-ineligible subject matter, and we sustain the rejection of claims 1, 2, 4, 5, 7, 12, 22, 23, 27–29, 31–33, and 36–41.

DECISION SUMMARY

Claims Rejected	Basis	Affirmed	Reversed
1, 2, 4, 5, 7, 12, 22, 23, 27–29, 31–33, 36–41	§ 101	1, 2, 4, 5, 7, 12, 22, 23, 27–29, 31–33, 36–41	

FINALITY AND RESPONSE

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). *See* 37 C.F.R. § 41.50(f).

AFFIRMED