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UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

Ex parte ROBERT T. CLARK and ADAM ELLIOTT

Appeal 2017-011808
Application 13/736,240
Technology Center 3600

Before ROBERT E. NAPPI, ST. JOHN COURTENAY III, and
LARRY J. HUME, *Administrative Patent Judges*.

COURTENAY, *Administrative Patent Judge*.

DECISION ON APPEAL

Appellants appeal under 35 U.S.C. § 134(a) from a final rejection of claims 34, 36, 37, and 40–55, which are all the claims pending in this application.¹ Claims 1–33, 35, 38, and 39 are canceled. We have jurisdiction over the pending claims under 35 U.S.C. § 6(b). An oral hearing was conducted on September 19, 2019.

We affirm.

¹ The real party in interest is *ID Insight Incorporated*, Assignee of the application. App. Br. 1 (emphasis added).

STATEMENT OF THE CASE ²

Introduction

Appellants' claimed invention "relates, in general, to apparatuses and methods for identifying account fraud. In particular, this invention relates to detecting fraud and assisting in fraud prevention due to identity theft including to but not limited to address change, account takeover fraud, and new account application fraud." Spec. 1, ll. 8–11.

Rejection

Claims 34, 36, 37, and 40–55 are rejected under 35 U.S.C. § 101, as being directed to a judicial exception, without significantly more. Final Act. 2.

ANALYSIS

We reproduce, *infra*, independent claim 34 in Table One, and independent claim 43 in Table Two. We have considered all of Appellants' arguments and any evidence presented. To the extent Appellants have not advanced separate, substantive arguments for particular claims, or other issues, such arguments are waived. *See* 37 C.F.R. § 41.37(c)(1)(iv).

Rejection of Claims 34, 36, 37, and 40–55 under 35 U.S.C. § 101

Issue: Under 35 U.S.C. § 101, did the Examiner err by rejecting claims 34, 36, 37, and 40–55, as being directed to a judicial exception, without significantly more?

² We herein refer to the Final Office Action, mailed May 31, 2016 ("Final Act."); Appeal Brief, filed May 18, 2017 ("App. Br."); Examiner's Answer, mailed July 26, 2017 ("Ans."), and the Reply Brief, filed Sept. 26, 2017 ("Reply Br.").

Principles of Law — 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.

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) (quoting *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. Pty. Ltd. 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 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.” (emphasis omitted)); *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, 69 (1972)). Concepts determined to be patent eligible include physical and chemical processes, such as “molding of rubber products” (*Diehr*, 450 U.S. at 193); “tanning, dyeing, making water-proof cloth, vulcanizing India rubber, smelting ores”

(*id.* at 182 n.7 (quoting *Corning v. Burden*, 56 U.S. (15 How.) 252, 267–68 (1854))); 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 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; *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.* (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.”).

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.*

Subject Matter Eligibility — 2019 Revised Guidance

The USPTO recently published revised guidance on the application of 35 U.S.C. § 101. *See* 2019 Revised Patent Subject Matter Eligibility Guidance, 84 Fed. Reg. 50 (Jan. 7, 2019) (“2019 Revised Guidance”). *This new guidance is applied in this Opinion.* Under the 2019 Revised Guidance, we first look to whether the claim recites:

(1) any judicial exceptions, including certain groupings of abstract ideas (i.e., mathematical concepts, mental processes, or certain methods of organizing human activity such as a fundamental economic practice or managing personal behavior or relationships or interactions between people);³ and

(2) additional elements that integrate the judicial exception into a practical application (*see* Manual of Patent Examining Procedure (“MPEP”) §§ 2106.05(a)–(c), (e)–(h)).^{4, 5}

See 2019 Revised Guidance, 84 Fed. Reg. at 51–52, 55.

A claim that integrates a judicial exception into a practical application applies, relies on, or uses 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. *See* 2019 Revised Guidance, 84 Fed. Reg. at 54. When the judicial exception is so

³ Referred to as “*Step 2A, Prong One*” in the Revised Guidance (hereinafter “*Step 2A, prong 1*”).

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

⁵ All references to the MPEP are to the Ninth Edition, Revision 08.2017 (rev. Jan. 2018).

integrated, then the claim is not directed to a judicial exception and is patent eligible under 35 U.S.C. § 101. *Id.*

Only if a claim: (1) recites a judicial exception and (2) does not integrate that exception into a practical application, do we then evaluate whether the claim provides an inventive concept. *See* 2019 Revised Guidance, 84 Fed. Reg. at 56; *Alice*, 573 U.S. at 217–18.

For example, we 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, and conventional activities previously known to the industry, specified at a high level of generality, to the judicial exception.

⁶

See 2019 Revised Guidance, 84 Fed. Reg. at 56.

Because there is no single definition of an “abstract idea” under *Alice* step 1, the PTO has recently synthesized, for purposes of clarity, predictability, and consistency, key concepts identified by the courts as abstract ideas to explain that the “abstract idea” exception includes the following three groupings:

1. Mathematical concepts—mathematical relationships, mathematical formulas or equations, mathematical calculations;
2. Mental processes— concepts performed in the human mind (including an observation, evaluation, judgment, opinion);
and
3. Certain methods of organizing human activity—fundamental economic principles or practices (including hedging,

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*.

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).

See 2019 Revised Guidance, 84 Fed. Reg. at 52.

According to the 2019 Revised Guidance, “[c]laims that do not recite [subject] matter that falls within these enumerated groupings of abstract ideas should not be treated as reciting abstract ideas,” except in rare circumstances. Even if the claims recite any one of these three groupings of abstract ideas, these claims are still not “directed to” a judicial exception (abstract idea), and thus are patent eligible, if “the claim as a whole integrates the recited judicial exception into a practical application of that exception.” *See* 2019 Revised Guidance, 84 Fed. Reg. at 53.

For example, limitations that **are** indicative of *integration into a practical application* include:

1. Improvements to the functioning of a computer, or to any other technology or technical field — *see* MPEP § 2106.05(a);
2. Applying the judicial exception with, or by use of, a particular machine — *see* MPEP § 2106.05(b);
3. Effecting a transformation or reduction of a particular article to a different state or thing — *see* MPEP § 2106.05(c); and
4. Applying or using the judicial exception in some other 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(e).

In contrast, limitations that are **not** indicative of *integration into a practical application* include:

1. Adding the words “apply it” (or an equivalent) with the judicial exception, or merely include instructions to implement an abstract idea on a computer, or merely uses a computer as a tool to perform an abstract idea — *see* MPEP § 2106.05(f);
2. Adding insignificant extra-solution activity to the judicial exception — *see* MPEP § 2106.05(g); and
3. Generally linking the use of the judicial exception to a particular technological environment or field of use — *see* MPEP 2106.05(h).

See 2019 Revised Guidance, 84 Fed. Reg. at 54–55 (“Prong Two”).

2019 Revised Guidance, Step 2A, Prong One⁷
The Judicial Exception

Under the 2019 Revised Guidance, we begin our analysis by first considering whether the claims recite any judicial exceptions, including certain groupings of abstract ideas, in particular: (a) mathematical concepts, (b) mental steps, and (c) certain methods of organizing human activities.

We note the Examiner concludes all claims 34, 36, 37, and 40–55 recite an abstract idea, including collecting, comparing, analyzing, and organizing information. Final Act. 3. In the Answer, the Examiner cites to several additional case authorities in support, including *Electric Power Group, LLC v. Alstom S.A.* (830 F.3d 1350 (Fed. Cir. 2016)), and *CyberSource Corp. v. Retail Decisions, Inc.*, 654 F.3d 1366 (Fed. Cir. 2011). Ans. 4–5.

⁷ Throughout this opinion, we give the claim limitations the broadest reasonable interpretation consistent with the Specification. *See In re Morris*, 127 F.3d 1048, 1054 (Fed. Cir. 1997).

In Table One below, we identify in *italics* the specific claim limitations that we conclude recite an abstract idea. We also identify in **bold** the additional (non-abstract) claim limitations that are generic computer components:

TABLE ONE

Independent Claim 34	Revised 2019 Guidance
<p>[a] A computer-implemented method for assessing a risk of identity theft fraud with respect to new applications, comprising:</p>	<p>A process (method) is a statutory subject matter class. <i>See</i> 35 U.S.C. § 101 (“Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.”).</p> <p>The “computer” is an additional non-abstract limitation.</p>
<p>[b] receiving as computer readable storage media first address information relating to an applicant for an account;</p>	<p>receiving information is insignificant extra-solution activity. 2019 Revised Guidance, 55 n.31; <i>see also</i> MPEP § 2106.05(g).</p> <p>The “computer readable storage media” is an additional non-abstract limitation.</p>
<p>[c] receiving as computer readable storage media reference address information relating to the applicant for the account;</p>	<p>receiving information is insignificant extra-solution activity. 2019 Revised Guidance, 55 n.31; <i>see also</i> MPEP § 2106.05(g).</p>

Independent Claim 34	Revised 2019 Guidance
	The “computer readable storage media” is an additional non-abstract limitation.
[d] accessing one or more databases to collect comparison data related to each of the first address and the reference address, the comparison data comprising at least one of demographic data, United States Postal Service data, previous history file data, warm address data, and fraud address data;	“accessing” is insignificant extra-solution activity and includes data gathering. 2019 Revised Guidance, 55 n.31; <i>see also</i> MPEP § 2106.05(g).
[e] appending the collected comparison data to the first and reference addresses;	“appending” is insignificant extra-solution activity. 2019 Revised Guidance, 55 n.31; <i>see also</i> MPEP § 2106.05(g).
[f] <i>comparing</i> the collected comparison data for the first address to the collected comparison data for the reference address to determine one or more variables by at least one of:	Abstract idea, i.e., “comparing” could be performed alternatively as a mental process. <i>See</i> 2019 Rev. Guid. 52.
[g] <i>comparing</i> financial make-ups of the two addresses to determine a financial make-up variable;	Abstract idea, i.e., “comparing” could be performed alternatively as a mental process. <i>See</i> 2019 Rev. Guid. 52.
[h] <i>identifying</i> a third party record that matches the first address with a name of the applicant to determine a third party variable;	Abstract idea, i.e., “identifying” could be performed alternatively as a mental process. <i>See</i> 2019 Rev. Guid. 52.

Independent Claim 34	Revised 2019 Guidance
[i] <i>comparing</i> home values of the two addresses to determine a home value variable;	Abstract idea, i.e., “comparing” could be performed alternatively as a mental process. <i>See</i> 2019 Rev. Guid. 52.
[j] <i>determining</i> a distance between the two addresses to determine a distance variable;	Abstract idea, i.e., “determining” could be performed alternatively as a mental process. <i>See</i> 2019 Rev. Guid. 52.
[k] <i>comparing</i> types of housing of the two addresses to determine a housing type variable;	Abstract idea, i.e., “comparing” could be performed alternatively as a mental process. <i>See</i> 2019 Rev. Guid. 52.
[l] <i>comparing</i> the addresses to a warm address file to determine a warm address variable;	Abstract idea, i.e., “comparing” could be performed alternatively as a mental process. <i>See</i> 2019 Rev. Guid. 52.
[m] <i>comparing</i> Internet usage data for the two addresses to determine an Internet usage variable; and	Abstract idea, i.e., “comparing” could be performed alternatively as a mental process. <i>See</i> 2019 Rev. Guid. 52.
[n] <i>determining</i> a length of residence for the reference address to determine a length of residence variable; and	Abstract idea, i.e., “determining” could be performed alternatively as a mental process. <i>See</i> 2019 Rev. Guid. 52.
[o] based on data related to previous cases of identity theft, <i>assigning</i> a weight to each of the one or more	Abstract idea, i.e., “assigning a weight” could be performed alternatively as a mental process. <i>See</i> 2019 Rev. Guid. 52.

Independent Claim 34	Revised 2019 Guidance
variables to determine a risk of identity theft using computer executable instructions.	

Abstract Ideas — Mental Processes

We conclude the *italicized* abstract idea steps identified above in Table One could be performed alternatively as mental processes under the Revised Guidance. *See* Claim 34. *See* 2019 Revised Guidance, 84 Fed. Reg. at 52.

If a method can be performed by human thought alone, or by a human using pen and paper, it is merely an abstract idea and is not patent eligible under § 101. *See CyberSource Corp. v. Retail Decisions, Inc.*, 654 F.3d 1366, 1372-73 (Fed. Cir. 2011); “That purely mental processes can be unpatentable, even when performed by a computer, was precisely the holding of the Supreme Court in *Gottschalk v. Benson*.” *CyberSource*, 654 F.3d at 1375. *See also Synopsys, Inc. v. Mentor Graphics Corp.*, 839 F.3d 1138, 1146–47 (Fed. Cir. 2016).

Moreover, “[u]sing a computer to accelerate an ineligible mental process does not make that process patent-eligible.” *Bancorp Services, L.L.C. v. Sun Life Assur. Co. of Canada* (U.S.), 687 F.3d 1266, 1279 (Fed. Cir. 2012); *see also OIP Techs., Inc. v. Amazon.com, Inc.*, 788 F.3d 1359, 1363 (Fed. Cir. 2015) (“relying on a computer to perform routine tasks more quickly or more accurately is insufficient to render a claim patent eligible.”).

Additional Limitations

As emphasized in **bold** *supra*, we note the additional non-abstract limitations of generic computer components. The computer (“*computer-implemented method*”) and the “computer readable storage media” are additional non-abstract limitations recited in independent claim 34.

See 2019 Revised Guidance, 84 Fed. Reg. at 52. We also note the supporting description of generic computer and network components in the Specification, for example:

Embodiments of the invention can be embodied in a computer program product. It will be understood that a computer program product including one or more features or operations of the present invention may be created in a computer usable medium (such as a CD-ROM or other medium) having computer readable code embodied therein. The computer usable medium preferably contains a number of computer readable program code devices configured to cause a computer to affect one or more of the various functions or operations herein described.

Spec. 36, ll. 3–8 (emphasis added).

We emphasize that *McRO, Inc. v. Bandai Namco Games America Inc.*, (837 F.3d 1299 (Fed. Cir. 2016)), guides: “[t]he abstract idea exception prevents patenting a *result* where ‘it matters not by what process or machinery the result is accomplished.’” 837 F.3d at 1312 (quoting *O’Reilly v. Morse*, 56 U.S. 62, 113 (1854)) (emphasis added).

Independent claim 51 recites similar language of commensurate scope that we conclude also falls into the same abstract idea category of mental processes, as mapped above for independent claim 34. *See supra* Table One.

Independent Claim 43

Because independent claim 43 is of different scope than independent claims 34 and 51, we similarly identify in *italics* the specific claim limitations of claim 43 that we conclude recite an abstract idea in Table Two, *infra*. We similarly identify in **bold** the additional (non-abstract) claim limitations that are generic computer components in claim 43:

TABLE TWO

Independent Claim 43	Revised 2019 Guidance
<p>[a] A computer-implemented method for assessing a risk of fraud, comprising:</p>	<p>A process (method) is a statutory subject matter class. <i>See</i> 35 U.S.C. § 101 (“Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.”).</p> <p>The “computer” is an additional non-abstract limitation.</p>
<p>[b] using computer executable instructions, <i>determining</i> demographic attribute variables for a received street addresses to predict the risk of fraud by comparing one or more of income, net worth, and homeownership for the received street address and a reference address</p>	<p>Abstract idea, i.e., “determining” could be performed alternatively as a mental process. <i>See</i> 2019 Rev. Guid. 52.</p> <p>The “computer” is an additional non-abstract limitation.</p>

Independent Claim 43	Revised 2019 Guidance
<p>[c] <i>analyzing</i> the demographic attribute variables against previous identity theft data, the previous identity theft data comprising a statistical analysis of demographic attributes in confirmed cases of fraud, wherein analyzing the determined differences comprises assigning a weight to the one or more demographic attribute variables; and</p>	<p>Abstract idea, i.e., “analyzing” could be performed alternatively as a mental process. <i>See</i> 2019 Rev. Guid. 52.</p>
<p>[d] presenting the analysis of demographic attribute variables as a score.</p>	<p>“presenting” is insignificant post-solution activity. 2019 Revised Guidance, 55 n.31; <i>see also</i> MPEP § 2106.05(g).</p>

Because we conclude all claims on appeal recite an abstract idea, as identified above, under *Step 2A, Prong One*, we proceed to *Step 2A, Prong Two*.

2019 Revised Guidance, Step 2A, Prong Two

Integration of the Judicial Exception into a Practical Application

Pursuant to the 2019 Revised Guidance, we consider whether there are additional elements set forth in the claims that integrate the judicial exception into a practical application. *See* 2019 Revised Guidance, 84 Fed. Reg. at 54–55.

MPEP § 2106.05(a)
Improvements to the Functioning of a Computer or
to Any Other Technology or Technical Field

McRO

Appellants contend “claim 34 is similar to the claims considered recently by the Federal Circuit in *McRo*.” App. Br. 13. In support, Appellants contend: “Similarly, Applicant’s [c]laim 34 is directed to a specific implementation of a distinct process having particular rules and representing an *improvement* over conventional fraud detection techniques.” App. Br. 14 (emphasis added).

We find Appellants’ argument based upon *McRO* unavailing because we conclude Appellants’ computer-implemented method is unlike the subject claim(s) considered by the court in *McRO*.⁸ See independent claims 34 and 51.

The patent at issue in *McRO* describes that prior character animation and lip synchronization were accomplished by human animators, with the assistance of a computer, which involved the use of a so-called “keyframe” approach in which animators set appropriate parameters, i.e., morph weights, at certain important times, i.e., in order to produce accurate and realistic lip synchronization and facial expressions. *McRO*, 837 F.3d at 1305. Animators knew what phoneme a character pronounced at a given time from a time-aligned phonetic transcription (a “timed transcript”). *Id.*

In accordance with the prior technique, animators, using a computer, thus, manually determined the appropriate morph weight sets for each

⁸ Appellants are referring to *McRO, Inc. v. Bandai Namco Games America Inc.*, 837 F.3d 1299 (Fed. Cir. 2016).

keyframe based on the phoneme timings in the timed transcript. *Id. See also SAP Am. v. InvestPic, LLC*, 898 F.3d 1161, 1167 (Fed. Cir. 2018) (distinguishing *McRO*):

The claims in *McRO* were directed to the creation of something physical—namely, the display of “lip synchronization and facial expressions” of animated characters on screens for viewing by human eyes. *Id.* at 1313. *The claimed improvement was to how the physical display operated (to produce better quality images)*, unlike (what is present here) a claimed improvement in a mathematical technique with no improved display mechanism. The claims in *McRO* thus were not abstract in the sense that is dispositive here. And those claims also avoided being “abstract” in another sense reflected repeatedly in our cases (based on a contrast not with “physical” but with “concrete”): they had the specificity required to transform a claim from one claiming only a result to one claiming a way of achieving it.

SAP, 898 F.3d at 1167 (emphasis added).

In contrast to the claimed invention in *McRO* that *improved how a physical display operated to produce better quality images (id.)*, claim 34 merely uses generic computer components to perform the recited steps that result in the final step of “assigning a weight to each of the one or more variables to determine a risk of identity theft using computer executable instructions.” Thus, Appellants’ claims on appeal do not *improve the operation of a physical display*, as was the case in *McRO*, nor the operation of any other computer component, such as the generic computer and “computer readable storage media” recited in claim 34. *See SAP*, 898 F.3d at 1167. Moreover, we conclude Appellants’ generic computer implementation in claim 34 performs steps that can be performed alternatively as mental processes, as discussed above.

In the Reply Brief, Appellants urge:

Applicant does not seek to protect the computerization of well-known processes. Rather, Applicant's claims provide for a new rules-based method for identifying a risk of identity theft fraud using a plurality of clearly defined variables, and a process of assigning appropriate weights to the variables.

Reply Br. 9.

Appellants further contend:

Applicant's claims provide a specific, technical solution to the problem of determining a risk of identity theft. The claimed solution improves fraud detection systems as a whole by accessing a variety of different databases, appending different types of data, and determining a variety of unique variables and variable weights to calculate a risk of fraud for an application.

Reply Br. 12.

Appellants specifically argue that the Examiner has failed to consider whether the claim limitations improve *another technology or technical field*.

Reply Br. 17 (emphasis added).

We disagree with all the arguments advanced in the Reply Brief, because an improved abstract idea (i.e., assessing a risk of identity theft fraud — claim 34) is still an abstract idea. *See Mayo*, 566 U.S. at 90 (holding that a novel and nonobvious claim directed to a purely abstract idea is, nonetheless patent-ineligible). We see nothing in Appellants' claims that specifically improves the efficiency of the computer, or another technology or technical field, because Appellants' claims, at best, merely improve the abstract idea of assessing a risk of identity theft fraud.

Thus, any analysis based upon anticipation (or obviousness) is not relevant to our analysis for patent eligibility under 35 U.S.C. § 101.

“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); *see also Diamond v. Diehr*, 450 U.S. 175, 188–89 (1981) (“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 § 101 categories of possibly patentable subject matter.”); *Affinity Labs of Texas, LLC v. DIRECTV, LLC*, 838 F.3d 1253, 1263 n.3 (Fed. Cir. 2016) (noting that an eligibility finding does not turn on the novelty of using a user-downloadable application for the particular purpose recited in the claims).

“Generally, a claim that merely describes an ‘effect or result dissociated from any method by which [it] is accomplished’ is not directed to patent-eligible subject matter.” *Apple, Inc. v. Ameranth, Inc.*, 842 F.3d 1229, 1244 (Fed. Cir. 2016) (citing *Internet Patents Corp. v. Active Network, Inc.*, 790 F.3d 1343, 1348 (Fed. Cir. 2015)).

This reasoning is applicable here. Accordingly, on this record, we conclude independent claims 34, 43, and 51 do not recite an improvement to the functionality of a computer or other technology or technical field. *See* MPEP § 2106.05(a).

MPEP §§ 2106.05(b) and (c)
The Bilski Machine-or-Transformation test (“MoT”)
as applied to method claims

At the outset, we note the Supreme Court cautions that the *MoT* test is not the sole test, but may provide a useful clue:

This Court’s precedents establish that the machine-or-transformation test is a useful and important clue, an investigative tool, for determining whether some claimed

inventions are processes under § 101. The machine-or-transformation test **is not the sole test** for deciding whether an invention is a patent-eligible “process.”

Bilski, 561 U.S. at 604 (emphasis added).

Because generic computer components are recited in all the computer-implemented method claims on appeal, we conclude claims 34, 36, 37, and 40–55 do not define or rely upon a “particular machine.” *See* MPEP § 2106.05(b). Further, we conclude method claims 34, 36, 37, and 40–55 do not transform an article to a different state or thing. *See* MPEP § 2106.05(c).

We note Appellants advance no arguments regarding the *Bilski* Machine-or-Transformation test in the Briefs. To the extent that the method claims on appeal might effect a *transformation of data*, we note the “[t]ransformation and reduction of an article ‘to a different state or thing’ is the clue to the patentability of a process claim that does not include particular machines.” *Gottschalk v. Benson*, 409 U.S. at 70. “The mere manipulation or reorganization of data, however, does not satisfy the transformation prong.” *CyberSource*, 654 F.3d at 1375.

Thus, without more, we conclude method claims 34, 36, 37, and 40–55 do not use a “particular machine” to apply the judicial exception (see MPEP § 2106.05(b)), or perform a transformation of an article to a different state or thing (see MPEP § 2106.05(c)).

*MPEP § 2106.05(e) — Meaningful Claim Limitations*⁹

The Examiner finds:

The claims do not recite limitations that are “significantly more” than the abstract idea because the claims do not recite an improvement to another technology or technical field, an improvement to the functioning of the computer itself, or **meaningful limitations** beyond generally linking the use of an abstract idea to a particular technological environment.

Final Act. 3 (emphasis added).

Appellants do not advance substantive arguments to any particular “meaningful” claim limitations, such as those of the types addressed under MPEP § 2106.05(e). Accordingly, on this record, we conclude independent computer-implemented method claim 34 has no other argued meaningful limitations, as considered under section 2106.05(e) of the MPEP, under the 2019 Revised Guidance.

MPEP § 2106.05(f)
*Merely including instructions to implement
an abstract idea on a computer, or
Merely using a computer as a tool
to perform an abstract idea*

The Examiner finds: “The limitations are merely instructions to implement the abstract idea on a computer and require no more than a generic computer to perform generic computer functions.” Final Act. 3.

Without more, we agree with the Examiner that Appellants’ claimed

⁹ MPEP § 2106.05(e): “Applying or using the judicial exception in some other *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.” (emphasis added).

invention merely implements the abstract idea using generic computer components, as depicted in **bold** type in Tables One and Two, *supra*.

MPEP § 2106.05(g)
Adding insignificant extra-solution activity
to the judicial exception

As mapped in the right columns of Tables One and Two, *supra*, we conclude independent claims 34 and 51 (and independent claim 43) recite extra-solution activities that courts have determined to be insufficient to transform judicially excepted subject matter into a patent-eligible application. *See* MPEP § 2106.05(g); 84 Fed. Reg. at 55 n.31.

MPEP § 2106.05(h)
Generally linking the use of the judicial exception to a particular
technological environment or field of use

Preemption

The Supreme Court guides: “the prohibition against patenting abstract ideas ‘cannot be circumvented by attempting to limit the use of the formula to a particular technological environment’ or [by] adding ‘insignificant post solution activity.’” *Bilski*, 561 U.S. at 611–12, (quoting *Diamond v. Diehr*, 450 U.S. 175, 191–92 (1981)).

Appellants contend: “Claim 34 does not seek to preempt all methods of determining a risk of fraud, all computer-based methods of determining a risk of fraud, or all rules-based methods of determining a risk of fraud.” App. Br. 15. Appellants further argue: “Taken as a whole, the limitations of Claim 34 amount to a specific, discrete implementation of a narrowly circumscribed method of determining a risk of identity theft fraud. Claim 34

does not preempt other methods of determining a risk of identity theft fraud.” *Id.* at 24.

In response, we note that preemption is not the sole test for patent eligibility. As our reviewing court has explained, “questions on preemption are inherent in and resolved by the § 101 analysis,” and, although “preemption may signal patent ineligible subject matter, the absence of complete preemption does not demonstrate patent eligibility.” *Ariosa Diagnostics, Inc. v. Sequenom, Inc.*, 788 F.3d 1371, 1379 (Fed. Cir. 2015); *cf. OIP Techs*, 788 F.3d at 1362–63 (“[T]hat the claims do not preempt all price optimization or may be limited to price optimization in the e-commerce setting do not make them any less abstract.”).

Nor do claims 34, 36, 37, and 40–55 on appeal present any other issues as set forth in the 2019 Revised Guidance regarding a determination of whether the additional generic elements integrate the judicial exception into a practical application. *See* Revised Guidance, 84 Fed. Reg. at 55.

Thus, under *Step 2A, Prong Two* (MPEP §§ 2106.05(a)–(c) and (e)–(h)), we conclude claims 34, 36, 37, and 40–55 **do not integrate the judicial exception into a practical application**. Therefore, we proceed to *Step 2B, The Inventive Concept*.

The Inventive Concept – Step 2B

Under the 2019 Revised Guidance, 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 adds a specific limitation beyond the judicial exception that is not “well-understood, routine, conventional” in the field (*see* MPEP § 2106.05(d)); **or**, simply appends

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

The Examiner finds: “All of the claimed additional features to the abstract idea are nothing more than a ‘*well-understood, routine, conventional activity,*’” citing in support to *Mayo*, 132 S. Ct. at 1298. See Final Act. 6.

The Examiner additionally finds: “the limitations in the claims fail to transform the abstract idea that they recite into patent-eligible subject matter, because the claims simply instruct the practitioner to implement the abstract idea with *routine, conventional activity.*” Final Act. 6.

The Examiner also finds the recited features do not make Appellants’ claims significantly more than the abstract idea because:

the limitations are appending *well-understood, routine, and conventional* activities previously known to the industry, specified at a high level of generality. The computing device merely performs generic computer functions of retrieving data and processing data. As such, there is no inventive concept sufficient to transform the claimed subject matter into a patent-eligible application. The claim does not amount to significantly more than the abstract idea itself.

Final Act. 8 (emphasis added).

*BASCOM*¹⁰

Appellants cite to *BASCOM* in support, and urge:

Filtering content on the Internet was already a known concept, and the patent describes how its particular arrangement of elements is a technical improvement over prior art ways of filtering such content." 827 F.3d at 1350 (emphasis added). The

¹⁰ See *BASCOM Glob. Internet Servs., Inc. v. AT&T Mobility LLC*, 827 F.3d 1341 (Fed. Cir. 2016).

court held “an inventive concept can be found in the non-conventional and non-generic arrangement of known, conventional pieces.” *Id.*

App. Br. 21.

Appellants further contend: “As described in Applicant's Appeal Brief, the claims are directed to ‘a specific, discrete implementation’ and are ‘narrowly circumscribed’ to provide a specific solution to a problem.”

Reply Br. 16.

We find Appellants’ analogy to *BASCOM* unavailing. *See* App. Br. 21. The Federal Circuit held in *BASCOM* that the claimed Internet content filtering, which featured an implementation “versatile enough that it could be adapted to many different users’ preferences while also installed remotely in a single location,” expressed an inventive concept in “the non-conventional and non-generic arrangement of known, conventional pieces.” *BASCOM*, 827 F.3d at 1350.

Here, Appellants have not shown a non-conventional, non-generic *arrangement* regarding the non-abstract limitations of generic computer components. *See* independent claim 34. *See* 2019 Revised Guidance, 84 Fed. Reg. at 52.

Therefore, it is our view that Appellants’ claims do not involve any improvements to another technology, technical field, or improvements to the functioning of the computer or network, as was seen by the court in *BASCOM*. Instead, we conclude Appellants’ claims 34, 36, 37, and 40–55 merely invoke generic computer components as a tool in which the instructions executing on the computer apply the judicial exception.

Further, regarding the use of the recited generic computer identified above in Tables One and Two, the Supreme Court has held “the mere

recitation of a generic computer cannot transform a patent-ineligible abstract idea into a patent-eligible invention.” *Alice*, 573 U.S. at 223. Our reviewing court provides additional guidance: *See FairWarning*, 839 F.3d at 1096 (“[T]he use of generic computer elements like a microprocessor or user interface do not alone transform an otherwise abstract idea into patent-eligible subject matter.”); *OIP Techs*, 788 F.3d at 1363 (claims reciting, *inter alia*, sending messages over a network, gathering statistics, using a computerized system to automatically determine an estimated outcome, and presenting offers to potential customers found to merely recite “‘well-understood, routine conventional activit[ies],’ either by requiring conventional computer activities or routine data-gathering steps” (alteration in original)).

This reasoning is applicable here. Therefore, on the record before us, Appellants have not shown that the claims on appeal add a specific limitation beyond the judicial exception that is not “well-understood, routine, and conventional” in the field (*see* MPEP § 2106.05(d)).

In light of the foregoing, we conclude, under the 2019 Revised Guidance, that each of Appellants’ claims 34, 36, 37, and 40–55, 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, for the reasons discussed above, we sustain the Examiner's Rejection under 35 U.S.C. § 101 of claims 34, 36, 37, and 40–55.¹¹

CONCLUSION

The Examiner did not err in rejecting claims 34, 36, 37, and 40–55 under 35 U.S.C. § 101, as being directed to a judicial exception, without significantly more.

DECISION

We affirm the Examiner's decision rejecting claims 34, 36, 37, and 40–55 under 35 U.S.C. § 101.

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

¹¹ To the extent Appellants have not advanced separate, substantive arguments for particular claims, or other issues, such arguments are waived. *See* 37 C.F.R. § 41.37(c)(1)(iv).