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BEFORE THE PATENT TRIAL AND APPEAL BOARD

Ex parte BAOSHI YAN, JIAQI GUO, SAVELIY URYASEV,
LEAH M. M. MCGUIRE, and CRAIG MARTELL

Appeal 2018-003737
Application 14/473,740
Technology Center 3600

Before ST. JOHN COURTENAY III, MONICA S. ULLAGADDI, and
JOHN D. HAMANN, *Administrative Patent Judges*.

COURTENAY, *Administrative Patent Judge*.

DECISION ON APPEAL

Appellants appeal under 35 U.S.C. § 134(a) from a second non-final rejection of claims 1–4 and 6–19, which are all the claims pending in this application.¹ Claim 5 is canceled. We have jurisdiction over the pending claims under 35 U.S.C. § 6(b).

We affirm.

¹ The real party in interest is appeal is the assignee, Microsoft Technology Licensing, LLC, recorded Nov. 1, 2017.

STATEMENT OF THE CASE ²

Introduction

Appellants' claimed invention "relates to the technical fields of computer software and, in one example embodiment, to discovery of contacts and accounts based on customer relationship management (CRM)." Spec. ¶ 2.

Rejection

Claims 1–4 and 6–19 are rejected under 35 U.S.C. § 101, as being directed to a judicial exception, without significantly more. *See* Non-Final Act. 5.

ANALYSIS

We reproduce representative independent claim 1 in Table One, *infra*. 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 1–4 and 6–19 under 35 U.S.C. § 101

Issue: Under 35 U.S.C. § 101, did the Examiner err by rejecting claims 1–4 and 6–19 as being directed to a judicial exception, without significantly more?

² We herein refer to the Non-Final Office Action, mailed March 23, 2017 ("Non-Final Act."); Appeal Brief, filed Sept. 8, 2017 ("App. Br."); Examiner's Answer, mailed Dec. 22, 2017 ("Ans."), and the Reply Brief, filed Feb. 22, 2018 ("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, 67 (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

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).

Revised Guidance, 84 Fed. Reg. at 54. When the judicial exception is so 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

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*.

3. 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).

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.

The Examiner concludes claims 1–4 and 6–19 recite an abstract idea, “specifically the concept of discovery of contacts.” Non-Final Act. 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).

TABLE ONE

In the table 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:

Independent Claim 1	Revised 2019 Guidance
<p>[a] A computer-implemented method 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>[b] <i>performing a similarity matching process</i> on one or more fields in account records obtained from a Customer Relationship Management (CRM) system and corresponding one or more fields in information obtained from a social network service to locate matches between one or more accounts in the account records for a first user and one or more company/organizations in the information obtained from the social network,</p>	<p>Abstract idea, i.e., <i>similarity matching</i> could be performed alternatively as a mental process. <i>See</i> 2019 Rev. Guid. 52.</p> <p>The “social network service” is an additional non-abstract network limitation.</p>

<p>wherein performing <i>the similarity matching</i> process includes utilizing a first pass process executing the following operations:</p>	
<p>[c] in a <i>first pass through the account records</i> for the first user:</p>	<p>Abstract idea, i.e., performing the first and second passes through the account records could be performed alternatively as a mental process. <i>See</i> 2019 Rev. Guid. 52.</p>
<p>[d] <i>comparing a first field</i> of each of the account records for the first user to a <i>first field</i> in each of a plurality of company/organization records <i>to calculate</i> a similarity value for each pair of account record and company/organization record;</p>	<p>Abstract idea, i.e., <i>comparing fields</i> and <i>calculating</i> could be performed alternatively as a mental process. <i>See</i> 2019 Rev. Guid. 52.</p>
<p>[e] <i>determining</i>, for each pair of account record and company/organization record, whether the corresponding calculated similarity value transgresses a preset similarity threshold;</p>	<p>Abstract idea, i.e., <i>determining</i> could be performed alternatively as a mental process. <i>See</i> 2019 Rev. Guid. 52.</p>
<p>[f] forming a set of pairs of account records and company/organization records having calculated similarity values transgressing the preset similarity threshold;</p>	<p>Forming a set of pairs of account records is insignificant extra-solution activity. 2019 Revised Guidance, 55 n.31; <i>see also</i> MPEP § 2106.05(g).</p>

<p>[g] in <i>a second pass</i> through only account records contained in the set of pairs;</p>	<p>Abstract idea, i.e., performing the first and second passes through the account records could be performed alternatively as a mental process. <i>See</i> 2019 Rev. Guid. 52.</p>
<p>[h] for each account record contained in the set of pairs, <i>comparing a second field</i> in the account record <i>with a second field</i> in the company/organization with the account record in the pair <i>to calculate</i> a revised similarity value, thus <i>calculating</i> a revised similarity value for each pair of account record and company/organization record in the set of pairs;</p>	<p>Abstract idea, i.e., <i>comparing fields</i> and <i>calculating</i> could be performed alternatively as a mental process. <i>See</i> 2019 Rev. Guid. 52.</p>
<p>[i] wherein <i>the first pass</i> is performed completely prior to beginning <i>the second pass</i>;</p>	<p>Abstract idea, i.e., performing the first and second passes through the account records could be performed alternatively as a mental process. <i>See</i> 2019 Rev. Guid. 52.</p>
<p>[j] wherein <i>the first pass process</i> reduces a number of processing cycles necessary for the computer to perform the comparisons of the second field in the account record with the second fields in the company/organization record;</p>	<p>Insignificant extra-solution activity. 2019 Revised Guidance, 55 n.31; <i>see also</i> MPEP § 2106.05(g). The “computer” is an additional non-abstract generic computer limitation.</p>
<p>[k] storing a mapping in a data store for each pair in the set whose revised similarity</p>	<p>Data collection or gathering for storage insignificant extra-solution</p>

<p>value transgresses a preset threshold; and</p>	<p>activity. 2019 Revised Guidance, 55 n.31; <i>see also</i> MPEP § 2106.05(g).</p> <p>The “data store” is a generic computer component such as a memory or hard drive. <i>See</i> Spec. ¶ 27: “in some example embodiments the CRM system 102 and/or the CRM data store 106 may be located on a non-server computer such as a desktop computer, laptop computer, or mobile device.”</p>
<p>[1] using mappings stored in the data store to provide insights to the first user.</p>	<p>Insignificant post-solution activity. 2019 Revised Guidance, 55 n.31; <i>see also</i> MPEP § 2106.05(g).</p>

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 1; 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. *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 Servs., LLC v. Sun Life Assurance Co.*, 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 “computer,” “social network service,” and “data store” additional non-abstract limitations of computer components. *See* 2019 Revised Guidance, 84 Fed. Reg. at 52. We note the supporting description of generic computer and network components in the Specification, for example: “The machine can be a personal computer (PC), a tablet PC, a set-top box (STB), a personal digital assistant (PDA), a cellular telephone, a web appliance, a network router, switch or bridge, or any machine capable of executing instructions (sequential or otherwise) that specify actions to be taken by that machine.” Spec. ¶ 116, *see also* Fig. 13; ¶¶ 27, 28, 105, 111, and 115.

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).

Remaining independent claims 10 and 16 recite 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 1.

Appeal 2018-003737
Application 14/473,740

See supra Table One. 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*

Under MPEP § 2106.05(a), Appellants contend the claims are analogous to the subject claims considered by the court in *Enfish*, because the result of the first and second pass “is a significant processing savings, as only 10,010,000 overall comparisons would have been performed for both fields, in contrast to the prior art’s 20,000,000.” App. Br. 21.

However, our reviewing court guides: “Using a computer to accelerate an ineligible mental process does not make that process patent-eligible.” *Bancorp*, 687 F.3d at 1279; *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.”).

Enfish

Appellants additionally argue: “as with the self-referential table in *Enfish*, the plain focus of the claims at issue in this case is on an improvement to computer functionality itself, not on economic or other tasks for which a computer is used in its ordinary capacity.” App. Br. 20.

Regarding Appellants’ arguments analogizing the claims before us on appeal to the subject claim in *Enfish (id.)*, we note the *Enfish* court concluded “the claims at issue . . . are not directed to an abstract idea within the meaning of *Alice*. Rather, they are directed to a *specific improvement to the way computers operate*, embodied in the self-referential table.” *Enfish, LLC v. Microsoft Corp.*, 822 F.3d 1327, 1336 (Fed. Cir. 2016) (emphasis added).

However, the claims on appeal here are *silent* regarding any mention of a database, much less a self-referential table, as was the focus in *Enfish*. Although a “data store” is recited in claims 1 and 10, it is not specifically claimed as being accessed as a database, e.g., with database queries using a self-referential table. Therefore, Appellants’ claims do not involve a self-referential database table similar to the specific type of logical table arrangement the *Enfish* court found was designed to improve the way a computer stores and retrieves data in memory. *See Enfish, Corp.*, 822 F.3d at 1336. Thus, Appellants have not persuasively shown that any features of the claimed invention *improve* the way the recited generic computer components store and retrieve data in a manner analogous to that found by the court in *Enfish*.

McRO

We similarly find Appellants’ argument based upon *McRO* unavailing because we conclude Appellants’ computer-implemented method, system, or medium is unlike the subject claim(s) considered by the court in *McRO*.⁸ See independent claims 1, 10, and 16. See App. Br. 22.

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 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

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

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 1 merely uses a generic computer and “data store” to perform the recited steps that result in the final step of “using mappings stored in the data store to provide insights to the first user.” 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 “computer” recited in the preamble of claim 1. *See SAP*, 898 F.3d at 1167. Moreover, we conclude Appellants’ generic computer implementation in claim 1 performs steps that can be performed alternatively as mental processes, as discussed above.

DDR Holdings

Nor is this a case involving eligible subject matter as in *DDR Holdings, LLC v. Hotels.Com, L.P.*, 773 F.3d 1245 (Fed. Cir. 2014). *See* App. Br. 15-16. In *DDR*, instead of a computer network operating in its normal, expected manner by sending a website visitor to a third-party website via a clicked advertisement, the claimed invention in *DDR* generated and directed the visitor to a hybrid page that presented: (1) product information from the third party, and (2) the visual “look and feel” elements from the host website, thus retaining the visitor at the original website. *DDR*, 773 F.3d at 1258–59. Given this particular Internet-based solution,

the court held that the claimed invention did not merely use the Internet to perform a business practice known from the pre-Internet world, but rather was necessarily rooted in computer technology to overcome a problem specifically arising in computer networks. *Id.* at 1257.

That is not the case here. Although Appellants' claimed invention results in the final step of "using mappings stored in the data store to provide insights to the first user," we find this post-solution activity does not improve the generic "data store" or "computer" recited in claim 1. We additionally note that an improved abstract idea 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). Therefore, it is our view that Appellants' claimed invention is not rooted in computer technology in the sense contemplated by *DDR*, in which the claimed invention solved a challenge particular to the Internet.

Accordingly, on this record, we conclude claim 1 does 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 41 and 42

The Examiner finds: "The claim[s] fail[] to recite . . . applying the judicial exception with or by use of a particular machine, [or] effecting a transformation of a particular article to a different state." Ans. 6–7.

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).

We note Appellants advance no arguments traversing the Examiner’s findings. *See* Ans. 6–7. Because generic computer components such as a “computer” and “a data store” are recited in computer-implemented method claim 1, we conclude claim 1, and the method claims that depend therefrom, do not define or rely upon a “particular machine.” *See* MPEP § 2106.05(b). Further, we conclude method claims 1–9 do not transform an article to a different state or thing. *See* MPEP § 2106.05(c).

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

The Examiner finds: “Viewed as a whole, the additional claim element(s) do not provide *meaningful* limitation(s) to transform the abstract idea into a patent eligible application of the abstract idea such that the claim(s) amounts to significantly more than the abstract idea itself.” Non-Final Act. 8–9. (emphasis added).

Under MPEP § 2106.05(e), Appellants advance no arguments pertaining to purportedly meaningful claim limitations. However, because Appellants urge that “like the claims at issue in *BASCOM*, the pending

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).

claims are ‘not an abstract-idea-based solution implemented with generic technical components in a conventional way’” (App. Br. 23), we will address Appellants’ *BASCOM* arguments *infra* under *Step 2B* of our analysis below (*Inventive Concept*).¹⁰

Therefore, on this record, we conclude independent method claim 1 has no other argued meaningful limitations as considered under section 2106.05(e) of the MPEP.

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 claims merely amount to the application or instructions to apply the abstract idea on a general purpose computer, and require nothing more than a generic computer system to carry out the abstract idea itself.” Ans. 10.

Without more, we conclude Appellants’ claimed invention merely implements the abstract idea using generic computer components, including a computer and data store. *See* Independent Claims 1, 10, and 16.

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

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

As mapped in the right column of Table One, *supra*, we conclude claim 1 recites extra or post-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

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 postsolution activity.’” *Bilski v. Kappos*, 130 S. Ct. 3218, 3230 (2010), (quoting *Diamond v. Diehr*, 450 U.S. 175, 191–92 (1981)).

Appellants’ argue: “the claims would not pre-empt any future inventions on other ways in which a computer could be used to discover contacts.” App. Br. 22.

However, 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); *accord Synopsys*, 839 F.3d at 1150 (“(holding that an argument about the absence of complete preemption

“misses the mark”); *cf. OIP Techs., Inc. v. Amazon.com, Inc.*, 788 F.3d 1359, 1362–63 (Fed. Cir. 2015) (“[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 1–4 and 6–19 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 1–4 and 6–19 **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.

*BASCOM*¹¹

Appellants cite to *BASCOM* in support, and urge: “like the claims at issue in *BASCOM*, the pending claims are ‘not an abstract-idea-based solution implemented with generic technical components in a conventional way.’” (App. Br. 23). Appellants further contend: “For example, the claims all specifically describe the operations of a first pass process. This specific solution constitutes a combination of operations that together comprise significantly more than the Examiner's purported abstract concept.” *Id.*

We find Appellants’ analogy to *BASCOM* unavailing. *See* App. Br. 23. 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, as recited in each of independent claims 1 and 10: i.e., the generic “computer” and “data store.” *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 1–4 and 6–19 merely

¹¹ *BASCOM*, 827 F.3d 1341.

invoke generic computer components as a tool in which the instructions executing on the computer apply the judicial exception.

Appellants traverse the Examiner’s finding that certain claim limitations are well-understood, routine, and conventional. *See* Reply Brief 2–3. In support, Appellants urge that the Examiner has failed to consider “the novelty of the first pass process as a factor in the second step of the *Alice* analysis. As such, the Examiner erred.” Reply Br. 2.

However, any analysis based upon anticipation (or obviousness) is not relevant to our analysis for patent eligibility under 35 U.S.C. § 101. Although the second step in the *Alice/Mayo* test is a search for an “inventive concept,” the analysis is not directed to novelty or nonobviousness, but rather searches for elements sufficient to ensure that the claimed invention is directed to more than a patent ineligible concept, such as an abstract idea. *See 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); *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)).

Further regarding the use of the recited generic “computer” and “data store” (independent claims 1 and 10), 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. The Federal Circuit provides additional guidance: “[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.” *FairWarning IP LLC, v. Iatric Systems, Inc.*, 839 F.3d 1089, 1096 (Fed. Cir. 2016); *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.”

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 1–4 and 6–19, 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

Appeal 2018-003737
Application 14/473,740

Rejection under 35 U.S.C. § 101 of claims 1–4 and 6–19.¹²

CONCLUSION

The Examiner did not err in rejecting claims 1–4 and 6–19 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 1–4 and 6–19 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

¹² 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).