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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
14/064,574	10/28/2013	Guenter Wiesinger	IP-P618US2/EBAY.281169	1992
150601	7590	12/18/2019	EXAMINER	
Shook, Hardy & Bacon L.L.P. (eBay Inc.) 2555 Grand Blvd. KANSAS CITY, MO 64108-2613			DESAI, RESHA	
			ART UNIT	PAPER NUMBER
			3625	
			NOTIFICATION DATE	DELIVERY MODE
			12/18/2019	ELECTRONIC

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UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

Ex parte GUENTER WIESINGER

Appeal 2018-008858
Application 14/064,574
Technology Center 3600

Before JOHN A. JEFFERY, ST. JOHN COURTENAY III, and
MARC S. HOFF, *Administrative Patent Judges*.

COURTENAY, *Administrative Patent Judge*.

DECISION ON APPEAL

Appellant¹ appeals under 35 U.S.C. § 134(a) from a Final rejection of claims 1–6, 8–16, and 18–20. Claims 7 and 17 are canceled. We have jurisdiction over the pending claims under 35 U.S.C. § 6(b).

We affirm.

¹ We use the word “Appellant” to refer to “applicant” as defined in 37 C.F.R. § 1.42(a). According to Appellant, the real party in interest is eBay, Inc. *See* Appeal Br. 3.

STATEMENT OF THE CASE

Introduction

Embodiments of Appellant’s invention relate to “a system to list items in an electronic publishing and/or sales system.” Spec. ¶ 2.

Rejections

- A. Claims 1–6, 8–16, and 18–20 are rejected on the ground of nonstatutory obviousness-type double patenting (OTDP) as being unpatentable over claims 1–16 of U.S. Patent No. 8,577,755 B2. Final Act. 5.
- B. Claims 1–6, 8–16, and 18–20 are rejected under 35 U.S.C. § 101, as being directed to a judicial exception, without significantly more. Final Act. 6.

Issues on Appeal

Did the Examiner err in rejecting claims 1–6, 8–16, and 18–20 on the ground of non-statutory OTDP as being unpatentable over claims 1–16 of U.S. Patent No. 8,577,755 B2?

Did the Examiner err in rejecting claims 1–6, 8–16, and 18–20 under 35 U.S.C. § 101, as being directed to a judicial exception, without significantly more?

ANALYSIS

We reproduce *infra* independent claim 1 in Table One. We have considered all of Appellant’s arguments and any evidence presented. To the extent Appellant has 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 A under
Non-Statutory Obviousness Type Double-Patenting (OTDP)*

Appellant advances no arguments regarding claims 1–6, 8–16, and 18–20, as rejected by the Examiner under non-statutory OTDP Rejection A. Arguments not made are waived. *See* 37 C.F.R. § 41.37(c)(1)(iv). Accordingly, we *pro forma* sustain the Examiner’s Rejection A of claims 1–6, 8–16, and 18–20 on the ground of non-statutory OTDP.

Rejection B under 35 U.S.C. § 101 and 2019 Revised Guidance

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. 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.”); *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 191 “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 (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 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);² and

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

(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)).^{3, 4}

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 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.⁵

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

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

⁴ All references to the MPEP are to the Ninth Edition, Revision 08.2017 (rev. Jan. 2018).

⁵ 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*.

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, 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 One⁶
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 that all claims 1–6, 8–16, and 18–20 recite an abstract idea:

The concept of “using one or more keywords to suggest information” is considered an idea [of] itself because it is a concept relating to organizing information that can be performed mentally. Several cases have found concepts relating to processes of organizing information that can be performed mentally abstract, such as using categories to organize, store and transmit information (*Cyberfone*), data recognition and storage (*Content Extraction*), and organizing information through mathematical correlations (*Digitech*).

See Final Act. 7.⁷

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:

⁶ 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).

⁷ The Examiner cites to: *Cyberfone Sys., LLC v. CNN Interactive Grp., Inc.*, 558 F. App'x 988 (Fed. Cir. 2014) (nonprecedential); *Content Extraction and Transmission LLC v. Wells Fargo et al.*, 776 F.3d 1343 (Fed. Cir. 2014); *Digitech Image Technologies, LLC v. Electronics for Imaging, Inc.*, 758 F.3d 1344 (Fed. Cir. 2014).

TABLE ONE

Independent Claim 1	2019 Revised Guidance
[a] A method comprising:	A method falls under the statutory subject matter class of a process. <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.”).
[b] receiving one or more search keywords corresponding to an item to be published in an item listing on a network-based publication system , the one or more search keywords being received from an interface presented in a web browser;	Receiving one or more search keywords corresponding to an item to be published in an item listing is insignificant extra-solution activity (data gathering). 2019 Revised Guidance, 55 n.31; <i>see also</i> MPEP § 2106.05(g). The network-based publication system is an additional non-abstract limitation.
[c] <i>searching a database, using a hardware processor of a machine, for matching information that corresponds to the one or more search keywords, the database storing a plurality of item information portions that are each referenced by one or more keywords, each item information portion being one</i>	Abstract idea: Searching for matching information that corresponds to the one or more search keywords could be performed alternatively as a mental process. <i>See</i> 2019 Revised Guidance 52. Storing a plurality of item information portions that are each referenced by one or more keywords is insignificant extra-solution activity

Independent Claim 1	2019 Revised Guidance
<p>of a plurality of different types of item information corresponding to different item listing elements;</p>	<p>(data gathering). 2019 Revised Guidance, 55 n.31; <i>see also</i> MPEP § 2106.05(g). The database and the “hardware processor of a machine” are additional non-abstract limitations.</p>
<p>[d] retrieving, from the database, the matching information that is referenced by one or more keywords corresponding to the one or more search keywords;</p>	<p>Retrieving, from the database, the matching information that is referenced by one or more keywords corresponding to the one or more search keywords is insignificant extra-solution activity (data gathering). 2019 Revised Guidance, 55 n.31; <i>see also</i> MPEP § 2106.05(g). The database is an additional non-abstract limitation.</p>
<p>[e] providing the matching information as suggested item information for one or more elements of the item listing being generated for publication on the network-based publication system;</p>	<p>Providing the matching information as suggested item information for one or more elements of the item listing is insignificant extra-solution activity. 2019 Revised Guidance, 55 n.31; <i>see also</i> MPEP § 2106.05(g). The network-based publication system is an additional non-abstract limitation.</p>
<p>[f] receiving a modification to the suggested item information in a first element of the item listing; and</p>	<p>Receiving a modification to the suggested item information in a first element of the item listing is insignificant extra-solution activity (i.e., data gathering). 2019 Revised Guidance, 55 n.31; <i>see also</i> MPEP § 2106.05(g).</p>

Independent Claim 1	2019 Revised Guidance
[g] automatically ⁸ updating the database by <i>adding the modified suggested item information to the database or revising the matching item information in the database</i> in response to <i>receiving the modified suggested item information</i> .	Abstract idea: adding the modified suggested item information to the database or revising the matching item information in the database could be performed alternatively as a mental process. <i>See</i> 2019 Revised Guidance 52. The database is an additional non-abstract limitation.

Abstract Idea — Mental Processes

After considering representative method claim 1 as a whole, we conclude that the recited *italicized* steps shown in Table One could also be performed alternatively as mental processes.⁹ *See* 2019 Revised Guidance,

⁸ *See Trading Techs. Int’l, Inc. v. IBG LLC*, 921 F.3d 1378, 1384 (Fed. Cir. 2019) (The “‘mere automation of manual processes using generic computers’ . . . ‘does not constitute a patentable improvement in computer technology.’”) quoting *Credit Acceptance Corp. v. Westlake Servs.*, 859 F.3d 1044, 1055 (Fed. Cir. 2017).

⁹ 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 Servs., L.L.C. v. Sun Life Assurance Co. of Can. (U.S.)*, 687 F.3d 1266, 1279 (Fed. Cir. 2012); *see also OIP Techs., Inc. v.*

84 Fed. Reg. at 52. *See also* “*Intellectual Ventures I LLC v. Symantec Corp.*, 838 F.3d 1307, 1318 (Fed. Cir. 2016) (‘[W]ith the exception of generic computer-implemented steps, there is nothing in the claims themselves that foreclose them from being performed by a human, mentally or with pen and paper.’).” 2019 Revised Guidance, 84 Fed. Reg. at 52 n.14.

“An abstract idea can generally be described at different levels of abstraction.” *Apple, Inc. v. Ameranth, Inc.*, 842 F.3d 1229, 1240 (Fed. Cir. 2016). Merely combining several abstract ideas does not render the combination any less abstract. *See 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.”); *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).

For at least these reasons, we conclude claim 1 recites the specific types of abstract ideas identified above in Table One.

Additional Limitations

As emphasized in **bold** in Table One, *supra*, we note the additional non-abstract limitations, for example (claim 1):

[b] a network-based publication system
[c] a database, [and] a hardware processor of a machine

Amazon.com, Inc., 788 F.3d 1359, 1363 (Fed. Cir. 2015) (“[R]elying on a computer to perform routine tasks more quickly or more accurately is insufficient to render a claim patent eligible.”).

We further note the supporting exemplary descriptions of generic computer components in the Specification, for example:

Figure 1 illustrates an example system diagram that may be used, in accordance with some example embodiments. System 100 may include a network and may be implemented using client-server architecture. A commerce platform, in the example form of a network-based marketplace 150, may provide server-side functionality, via network 110 (e.g., the Internet) to one or more clients. Figure 1 illustrates, for example, a web client 105 (e.g., a browser, such as the Internet Explorer® browser developed by Microsoft® Corporation of Redmond, Washington), and a programmatic client 110 executing on respective client machines 115 and 120.

Spec. ¶ 19 (emphasis omitted).

The network-based marketplace 150 may include an application program interface (API) server 155 and a web server 160. The concept of API is known to one skilled in the art. The API server 155 and the web server 160 may be coupled to one or more application servers 165. The API server 155 and the web server 160 may provide programmatic and web interfaces to the one or more application servers 165. The application servers 165 may host one or more marketplace applications 170 and one or more payment applications 175. The application servers 165 may be coupled to one or more database servers 180 that facilitate access to information stored in one or more databases 185.

Spec. ¶ 20.

We emphasize that *McRO, Inc. v. Bandai Namco Games Am. 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). *See supra* Table One.

Because we conclude all claims 1–6, 8–16, and 18–20 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

Appellant argues the claimed invention provides an improvement to computer functionality:

Based on the Federal Circuit’s decision in *McRO*, a claim can be found to be directed to an **improvement** in computer-related technology when indicated by “a particular solution to a problem or a particular way to achieve a desired outcome defined by the claimed invention, as opposed to merely claiming the idea of a solution or outcome.”

In the present application, the claims recite a *particular way* to facilitate the generation of item listings on a network-based publication system. In particular, the claims recite features in which a database stores “a plurality of item information portions that are each referenced by one or more keywords, each item information portion being one of a plurality of different types of item information corresponding to different item listing elements.” By storing item information portions that are referenced by keywords, the database can be searched to identify matching information that can be used to

populate elements of an item listing being generated with suggested item information. Additionally, the claims recite features for updating the database to further improve the item listing generation process. In particular, when a modification to suggested item information in a first element of an item listing is received, the database is automatically updated “by adding the modified suggested item information to the database or revising the matching item information in the database in response to receiving the modified suggested item information.” The claims do not merely recite the idea of a solution or outcome. Instead, the claims recite a *particular way* to **improve** the process of generating item listings for a network-based publication system. As such, the claims are directed to an **improvement in computer-related technology** that demonstrates the claims are not directed to an abstract idea.

Appeal Br. 17–18 (emphasis added).

McRO

For the reasons discussed below, we find Appellant’s reliance on *McRO* is misplaced.

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.*

For example, *McRO*’s ’576 patent (U.S. Patent No. 6,307,576) describes computer software for matching audio to a 3D animated mouth movement to provide lip-synced animation. *McRO*’s claims contain: (i) specific limitations regarding a set of rules that “define[] a morph weight set

stream as a function of phoneme sequence and times associated with said phoneme sequence” to enable computers to produce ““accurate and realistic lip synchronization and facial expressions in animated characters”” (*McRO*, 837 F.3d at 1313 (alteration in original)) and, when viewed as a whole, are directed to (ii) a “technological improvement over the existing, manual 3–D animation techniques” that uses “limited rules in a process specifically designed to achieve an improved technological result.” *Id.* at 1316.

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. *McRO*, 837 F.3d at 1316. *See SAP Am., Inc. 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* (see *SAP*, 898 F.3d at 1167), merely “[g] automatically updating the database by adding the modified suggested item information to the database or revising the

matching item information in the database in response to receiving the modified suggested item information” does not improve the recited “database” or “hardware processor of a machine.” *See* 2019 Revised Guidance, 84 Fed. Reg. at 52. We note “a claim for a *new* abstract idea is still an abstract idea.” *Synopsys*, 839 F.3d at 1151.

Thus, Appellant 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 “hardware processor of a machine” or “database,” as recited in independent claim 1. *See SAP*, 898 F.3d at 1167. Moreover, we conclude Appellant’s generic “hardware processor of a machine” in claim 1 performs steps that can be performed alternatively as mental processes, as discussed above.

Appellant additionally argues in the Reply Brief:

As in *DDR*, Appellant’s claimed invention can solve business problems related to facilitating online transactions, particularly for item listings published by network-based publication systems. For instance, the claimed invention can solve such business problems by facilitating listing items on a network-based publication system. However, also like in *DDR*, the claimed invention is directed to a solution to a problem that is necessarily rooted in computer technology as aspects of the claimed invention are tied to databases for a network-based publication system.

Reply Br. 3.

DDR Holdings

We do not agree with Appellant that this is a case involving eligible subject matter, as was the case in *DDR Holdings, LLC v. Hotels.com, L.P.*, 773 F.3d 1245 (Fed. Cir. 2014). *See* Appeal Br. 23.

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 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 Appellant’s claimed invention results in the last recited step of “[g] automatically updating the database by adding the modified suggested item information to the database or revising the matching item information in the database in response to receiving the modified suggested item information,” this step does not improve the recited “hardware processor of a machine” or “database.” As noted above, 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 Appellant’s 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.

As set forth in MPEP § 2106.05(a):

To show that the involvement of a computer assists in *improving the technology*, the claims *must recite the details*

regarding how a computer aids the method, the extent to which the computer aids the method, or the significance of a computer to the performance of the method. Merely adding generic computer components to perform the method is not sufficient. Thus, the claim must include more than mere instructions to perform the method on a generic component or machinery to qualify as an improvement to an existing technology.

(Emphasis added).

Here, Appellant has not provided sufficient details regarding how the recited “hardware processor of a machine” and/or “database” (claim 1) include more than mere instructions to perform the recited steps to qualify as an improvement to an existing technology. As discussed above, we conclude Appellant’s generic computer implementation performs steps or functions that can be performed alternatively as mental processes. *See* independent claim 1. Regarding the last “automatically” performed step “g” of claim 1, see *Trading Techs. Int’l*, 921 F.3d at 1384 (The “‘mere automation of manual processes using generic computers’ . . . ‘does not constitute a patentable improvement in computer technology’”), quoting *Credit Acceptance Corp.*, 859 F.3d at 1055.

Accordingly, on this record, we conclude independent claims 1, 11, and 20 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”)

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).

Here, Appellant advances no arguments that any of method claims 1–6 and 8–10 are tied to a particular machine, or transform an article to a different state or thing. *See* MPEP § 2106.05(c).

*MPEP § 2106.05(e) — Meaningful Claim Limitations*¹⁰

The Examiner finds the claims recite:

a network-based publication system, an interface presented in a web browser, a database and a plurality of modules, which do not add **meaningful limitations** to the concept of “using one or more keywords to suggest information” beyond generally linking the abstract idea to a particular technological environment, that is, implementation via computers.

Final Act. 8 (emphasis added).

Appellant does not advance further substantive, persuasive arguments as to any particular “meaningful” claim limitations, such as those of the types addressed under MPEP § 2106.05(e), *that impose meaningful limits on the judicial exception*.

¹⁰ *See 2019 Revised Guidance*, 84 Fed. Reg. 55, citing MPEP § 2106.05(e): “[A]pply[ing] or us[ing] 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).

As discussed above, we conclude the recited *italicized* steps shown in Table One could also be performed alternatively as a mental process. *See* 2019 Revised Guidance, 84 Fed. Reg. at 52. As discussed above, we see nothing in Appellant’s claims that specifically improves the efficiency of the database or the “hardware processor of a machine” (claim 1), or another technology or technical field, as addressed above under MPEP § 2106.05(a).

Accordingly, on this record, we conclude representative independent claim 1 has no other argued meaningful limitations, as considered under section 2106.05(e) of the MPEP, pursuant to 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

We conclude Appellant’s claimed invention merely implements the abstract idea using *instructions* executed on generic computer components, as depicted in **bold** type in Table One, and as supported in our reproduction of the Specification, paragraphs 19 and 20, *supra*. Thus, we conclude Appellant’s claims merely use a computer/processor as a tool to perform an abstract idea.

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 that representative independent 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*, 561 U.S. at 611–12, (*quoting Diehr*, 450 U.S. at 191–92).

Appellant advances no *lack of preemption* argument in the Appeal Brief or Reply Brief. Nor do claims 1–6, 8–16, and 18–20 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* 2019 Revised Guidance, 84 Fed. Reg. at 55.

Thus, under *Step 2A, Prong Two* (MPEP §§ 2106.05(a)–(c) and (e)–(h)), we conclude claims 1–6, 8–16, and 18–20 **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.

Berkheimer v. HP Inc., 881 F.3d 1360 (Fed. Cir. 2018)

We note that *Berkheimer* was decided by the Federal Circuit on February 8, 2018. On April 19, 2018, the PTO issued the Memorandum titled: “Changes in Examination Procedure Pertaining to Subject Matter Eligibility, Recent Subject Matter Eligibility Decision (*Berkheimer v. HP, Inc.*)” (hereinafter “*Berkheimer* Memorandum”).¹¹ The *Berkheimer* Memorandum provided specific requirements for an Examiner to support with evidence any finding that *claim elements* (or a *combination of elements*) are well-understood, routine, or conventional.

Under *Step 2B*, the Examiner finds, *inter alia*:

The claims do not include additional elements taken alone or as an ordered combination that are sufficient to amount to significantly more than the judicial exception. In the case of

¹¹ Available at <https://www.uspto.gov/sites/default/files/documents/memo-berkheimer-20180419.PDF>.

independent claims 1, 11 and 20, the claimed processor as recited is a generic computer component that performs the that are **well-understood, routine, and conventional activity** of automating the mental task of “using one or more keywords to suggest information” (*See Benson*, 409 U.S. at 65-67; *Bancorp*, 687 F.3d at 1275; *CyberSource*, 654 F.3d at 1375).

Final Act. 7–8; *See also* Ans. 5 (emphasis added).

In the Appeal Brief, filed May 18, 2018, Appellant timely argues *Berkheimer* as an intervening case authority:

Each of Appellant’s claims recites a combination of elements that is not well-understood, routine, and conventional. As discussed above, the claims recite features in which a database stores information portions from item listings with the information portions being references by keywords. This is in contrast to conventional databases for searching network-based publications systems in which whole item listings are associated with keywords. The claims also recites features allowing users to update the database when a modification to suggested item information in a first element of an item listing being generated is received. This is in contrast to conventional search systems for network-based publication systems that do not allow a user to modify information in an existing item listing. Accordingly, the claims recite a combination of elements that is not well-understood, routine, and conventional. Moreover, *the Examiner has failed to demonstrate them as such as required by the USPTO guidance.*

Appeal Br. 22 (emphasis added).

However, we find unavailing the Appellant’s argument that “the Examiner has failed to demonstrate them as such as required by the USPTO guidance” (Appeal Br. 22), because the Examiner did provide *Berkheimer* evidence of type 2 in the Final Action (7–8), i.e.,: “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).”

Berkheimer Memorandum, p. 4. As noted above, the Examiner found in the Final Action:

In the case of independent claims 1, 11 and 20, the claimed processor as recited is a generic computer component that performs the that are **well-understood, routine, and conventional activity** of automating the mental task of “using one or more keywords to suggest information” (*See Benson*, 409 U.S. at 65-67; *Bancorp*, 687 F.3d at 1275; *CyberSource*, 654 F.3d at 1375).

Final Act. 7–8.

However, the Appellant fails to rebut or otherwise traverse the Examiner’s *Berkheimer* findings regarding “*Benson*, 409 U.S. at 65-67; *Bancorp*, 687 F.3d at 1275; [and] *CyberSource*, 654 F.3d at 1375,” in the Appeal Brief or the Reply Brief. Final Act. 8. Arguments not made are waived. *See* 37 C.F.R. § 41.37(c)(1)(iv).

Further, regarding the use of the recited generic computer components identified above in Table One, 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, Appellant has not shown that the claims on appeal add a specific limitation beyond the judicial exception that is not well-understood, routine, and conventional, when the claim limitations are considered both individually and as an ordered combination. *See* MPEP § 2106.05(d).

In light of the foregoing, we conclude, under the 2019 Revised Guidance, that each of Appellant’s claims 1–6, 8–16, and 18–20 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 B under 35 U.S.C. § 101 of claims 1–6, 8–16, and 18–20.

CONCLUSION

Under our 2019 Revised Guidance, as governed by relevant case law, we conclude all claims 1–6, 8–16, and 18–20, rejected under 35 U.S.C. § 101, are directed to patent-ineligible subject matter.

We *pro forma* affirm the Examiner’s decision rejecting claims 1–6, 8–16, and 18–20 as being unpatentable over claims 1–16 of U.S. Patent No. 8,577,755 B2 on the ground of non-statutory OTDP. *See* Final Act. 5.

DECISION SUMMARY

Claims Rejected	35 U.S.C. §	Reference(s)Basis	Affirmed	Reversed
1-6, 8-16, 18-20	101	Eligibility	1-6, 8-16, 18-20	
1-6, 8-16, 18-20		Non-statutory OTDP	1-6, 8-16, 18-20	
Overall Outcome			1-6, 8-16, 18-20	

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