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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
12/108,545	04/24/2008	Jose Emir Garza	GB920070049US1 8152-0101	1833
73109	7590	09/23/2019	EXAMINER	
Cuenot, Forsythe & Kim, LLC 20283 State Road 7 Ste. 300 Boca Raton, FL 33498			YUN, CARINA	
			ART UNIT	PAPER NUMBER
			2194	
			NOTIFICATION DATE	DELIVERY MODE
			09/23/2019	ELECTRONIC

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UNITED STATES PATENT AND TRADEMARK OFFICE

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BEFORE THE PATENT TRIAL AND APPEAL BOARD

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*Ex parte* JOSE EMIR GARZA, STEPHEN JAMES HOBSON,  
and PETER SIDDALL

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Appeal 2018-008901  
Application 12/108,545  
Technology Center 2100

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Before JEFFREY S. SMITH, JOHN A. EVANS, and CHRISTA P. ZADO,  
*Administrative Patent Judges.*

EVANS, *Administrative Patent Judge.*

DECISION ON APPEAL

Appellants<sup>1</sup> seek our review under 35 U.S.C. § 134(a) of the Examiner’s Final Rejection of 49–66, which constitute all the claims pending in this application. App. Br. 1. Claims 1–48 have been canceled. *Id.* We have jurisdiction under 35 U.S.C. § 6(b).

We REVERSE.<sup>2</sup>

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<sup>1</sup> Appellants state the International Business Machines Corporation is the real party in interest. App. Br. 1.

<sup>2</sup> Rather than reiterate the arguments of Appellants and the Examiner, we refer to the Appeal Brief (filed May 7, 2018, “App. Br.”), the Reply Brief

## STATEMENT OF THE CASE

The claims relate to a method of messaging between two computer systems. *See* Abstract.

### *Invention*

Claims 49, 55, and 61 are independent. An understanding of the invention can be derived from a reading of Claim 49, which is reproduced below.

49. A computer-implemented method within a first messaging computer system configured to interact with a shared storage device separate from the first messaging computer system, comprising:

transmitting, by a first application within the first messaging computer system, a message to the shared storage device;

intercepting, prior to being received into the shared storage device, the message;

generating, responsive to a size of the message having exceeded a predetermined threshold, a pointer for the message;

storing the pointer in the shared storage device; and

storing the message in a first log owned by the first messaging application, wherein

the first log is accessible by a second messaging application within a second messaging computer system separate from the first messaging computer system, and

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(filed September 18, 2018, “Reply Br.”), the Examiner’s Answer (mailed July 20, 2018, “Ans.”), the Final Action (mailed December 5, 2017, “Final Act.”), and the Specification (filed April 24, 2008, “Spec.”) for their respective details.

access rights to the first log by the first messaging application are greater than access rights to the first log by the second messaging application.

*References and Rejections*<sup>3</sup>

Imamura et al. (“Imamura”)	US 5,781,741	July 14, 1998
Miller	US 6,915,457 B1	July 5, 2005
Rooke et al. (“Rooke”)	US 2007/0288564 A1	Filed Aug. 31, 2006
Flaherty et al. (“Flaherty”)	US 2006/0200516 A1	Sept. 7, 2006

1. Claims 49–66 stand rejected under 35 U.S.C. § 112 (1<sup>st</sup> ¶), as failing to comply with the written description requirement. Final Act. 3.
2. Claims 49–66 stand rejected under 35 U.S.C. § 112 (2<sup>nd</sup> ¶), as indefinite. Final Act. 4.
3. Claims 49–66 stand rejected under 35 U.S.C. § 101 as directed to a judicial exception without significantly more. Final Act. 5.
4. Claims 49–51, 55–57, and 61–63 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Flaherty and Miller. Final Act. 6–9.
5. Claims 52, 54, 58, 60, 64, and 66 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Flaherty, Miller, and Imamura. Final Act. 9–10.

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<sup>3</sup> The present Application is being examined under the pre-AIA first to invent provisions. Final Act. 2.

6. Claims 53, 59, and 65 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Flaherty, Miller, and Rooke. Final Act. 10–11.

## ANALYSIS

We have reviewed the rejections of Claims 49–66 in light of Appellants’ arguments. We consider Appellants’ arguments as they are presented in the Appeal Brief, pages 6–32 and the Reply Br., pages 1–16. For the reasons that follow, we are persuaded the Examiner has erred.

### CLAIMS 49–66: WRITTEN DESCRIPTION AND INDEFINITENESS.

With respect to written description, Appellants state Claims 50–66 stand or fall with Independent Claim 49. App. Br. 6. R. 52. With respect to indefiniteness, Appellants state Claims 50–54 and 56–66 stand or fall with Independent Claim 49 and Claim 55 stands or falls alone. App. Br. 10.

*A first log owned by a first messaging application.*

Independent Claims 49, 55, and 61, recite, *inter alia*, “storing the message in a first log owned by the first messaging application.” The Examiner finds the Specification describes the first log being associated with the first application, but does not describe the first log as being owned by the first application. Final Act. 3 (Citing Spec., ¶ 22).

Appellants contend support for the recitation “owned” is present in the original Specification. App. Br. 6 (quoting Spec., ¶ 23)(“[a] messaging application typically has read/write access to its own log.”).

The Examiner finds the Specification discloses “the first messaging application has an associated first log and the first log ‘owned’ by the first messaging application.” Ans. 13. The Examiner finds the disclosure of “own” to mean an application is in possession of, i.e., “owns” an association to a log, but does not own the log, itself. *Id.*

The Specification discloses: “A messaging application typically has read/write access to its own log.” Spec., ¶ 23. Appellants contend that in the disclosure, the word “own” clearly and unambiguously modifies the log (i.e., ‘own log’) - not an association.” Reply Br. 3.

We agree with Appellants and find a person of skill in the art would understand the application “owns” a log, not an association. Figure 1 depicts first computer system (105) and second computer system (125). Appellants disclose first computer system (105) comprises a first application (110), a first messaging application (115) (e.g. comprising a queue manager) and apparatus (117). Spec., ¶ 17. Appellants disclose second computer system (125) comprises a second application (130), a second messaging application (135) (e.g. comprising a queue manager), and may also comprise an apparatus. *Id.* Appellants disclose the first messaging application (115) has an associated first log (140) and the second messaging application (135) has an associated second log (145). Spec., ¶ 23. But Appellants distinguish the two types of association by disclosing [a] messaging application typically has read/write access to its *own log* (shown with a solid line in FIG. 1) and read only access to a log associated with another messaging application (shown with a dashed line in FIG. 1). Spec., ¶ 23 (emphasis added). Appellant discloses a messaging application can thus read data from

a log of another messaging application. *Id.* Thus, we find, first log (140) is associated with, and owned by first messaging application (115) and second log (145) is associated with, and owned by second messaging application (135).

*Access rights.*

The Examiner finds Claims 49, 50, 55, 56, 61, and 62 recite, *inter alia*, “access rights to the first log by the first messaging application are greater than access rights to the first log by the second messaging application,” but that the Specification does not describe access rights of the first application being greater than the second application. Final Act. 3.

Appellants contend the accused recitation is supported by original disclosure. App. Br. 6 (quoting Spec., ¶ 23)(“[a] messaging application typically has read/write access to its own log . . . and read only access to a log associated with another messaging application.”).

The Examiner finds the Specification does not specifically state that “greater” means “read/write” access. Ans. 14.

We disagree with the Examiner and find a person of ordinary skill in the art would understand that an application that had read/write access to a log would have “greater” access to that log than would an application limited to read-only access.

In view of the foregoing, we decline to sustain the rejection of Claims 49–66, either as lacking written description or as being indefinite.

*Transitory media.*

The Examiner finds Claim 55 (and claims dependent therefrom) recites a product claim containing a computer usable storage device which

may be interpreted as having both transitory and non-transitory embodiments. Final Act. 4. The Examiner finds a transitory embodiment is directed to non-statutory subject matter. *Id.*

Claim 55 recites, *inter alia*, “a computer usable storage device.” Appellants cite *Ex parte Lance* for the proposition that: “the broadest reasonable interpretation of a computer readable storage memory is a computer readable storage device, and that claim 20 is therefore an article of manufacture directed to statutory subject matter.” App. Br. 13 (quoting *Ex parte Lance*, Appeal No. 2014/007071, Application 12/625,044, slip op. 5 (October 21, 2016)).

We agree with Appellants. The IEEE defines “device” in terms of hardware, e.g., “[a] hardware unit that is capable of performing some specific function” and [a] mechanism or piece of equipment designed to serve a purpose or perform a function.” IEEE 100 The Authoritative Dictionary of IEEE Standards Terms, 7<sup>th</sup> Ed., D297, IEEE (2000). We find a person of ordinary skill in the computer arts would understand the claimed “computer usable storage device” to refer to a unit of hardware and not to an evanescent, transitory thing.

In view of the foregoing, we decline to sustain the rejection of Claims 49–66 under 35 U.S.C. § 112 (either 1<sup>st</sup> or 2<sup>nd</sup> ¶).

**CLAIMS 49–66: INELIGIBLE SUBJECT MATTER.**

Appellants state Claims 50–66 stand or fall with Independent Claim 49. App. Br. 17. R. 63. Therefore, we decide the appeal of the § 101 rejections with reference to Claim 49 and refer to the rejected claims

collectively herein as “the claims.” *See* 37 C.F.R. § 41.37(c)(1)(iv); *see also In re King*, 801 F.2d 1324, 1325 (Fed. Cir. 1986).

#### PRINCIPLES OF LAW

##### A. 35 U.S.C. § 101

An invention is patent-eligible if it claims a “new and useful process, machine, manufacture, or composition of matter.” 35 U.S.C. § 101.<sup>4</sup> However, the Supreme Court has long interpreted 35 U.S.C. § 101 to include implicit exceptions: “[I]aws of nature, natural phenomena, and abstract ideas” are not patentable. *Mayo Collaborative Services v. Prometheus Labs., Inc.*, 566 U.S. 66, 70 (2012) (citing *Diamond v. Diehr*, 450 U.S. 175, 185 (1981)).

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

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<sup>4</sup> This threshold analysis of whether a claim is directed to one of the four statutory categories of invention, *i.e.*, a process, machine, manufacture, or composition of matter, is referred to as “*Step I*” in the patent-eligibility inquiry under 35 U.S.C. § 101.

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; *see also Bilski*, 561 U.S. at 611); mathematical formulas (*Parker v. Flook*, 437 U.S. 584, 594–95 (1978)); and mental processes (*Gottschalk v. Benson*, 409 U.S. 63, 67 (1972)). Concepts determined to be patent eligible include physical and chemical processes, such as “molding rubber products” (*Diehr*, 450 U.S. at 191); “tanning, dyeing, making water-proof cloth, vulcanizing India rubber, smelting ores” (*id.* at 182 n.7 (quoting *Corning v. Burden*, 56 U.S. (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 “a claim drawn to subject matter otherwise statutory does not become nonstatutory simply because it uses a mathematical formula.” *Diehr*, 450 U.S. at 187, 191 (“We view respondents’ claims as nothing more than a process for molding rubber products and not as an attempt to patent a mathematical formula.”). Having said that, the 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.* at 191 (citing *Benson and Flook*), 187 (“It is now commonplace that an *application* of a law of nature or mathematical formula to a known structure or process may

well be deserving of patent protection.”).

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

If the claim is “directed to” an abstract idea, we turn to the second step of the *Alice* and *Mayo* framework, where “we must examine the elements of the claim to determine whether it contains an ‘inventive concept’ sufficient to ‘transform’ the claimed abstract idea into a patent-eligible application.” *Alice*, 573 U.S. at 221 (citation omitted). “A claim that recites an abstract idea must include ‘additional features’ to ensure ‘that the [claim] is more than a drafting effort designed to monopolize the [abstract idea].’” *Id.* (quoting *Mayo*, 566 U.S. at 77 (alteration in original)). “[M]erely requir[ing] generic computer implementation[] fail[s] to transform that abstract idea into a patent-eligible invention.” *Id.*

B. United States Patent and Trademark Office Revised Guidance<sup>5</sup>

The USPTO recently published revised guidance in the Federal Register concerning the application of § 101.

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<sup>5</sup> 2019 Revised Patent Subject Matter Eligibility Guidance, 84 Fed. Reg. 50 (January 7, 2019) (hereinafter “Revised Guidance,” or “Rev. Guid.”) (<https://www.govinfo.gov/content/pkg/FR-2019-01-07/pdf/2018-28282.pdf>).

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

(1) any judicial exceptions, including certain groupings of abstract ideas (i.e., mathematical concepts, certain methods of organizing human activity such as a fundamental economic practice, or mental processes);<sup>6</sup> and

(2) additional elements that integrate the judicial exception into a practical application (*see* Manual for Patent Examining Procedure (“MPEP”) §§ 2106.05(a)–(c), (e)–(h)).<sup>7</sup>

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

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

(4) simply appends well-understood, routine, conventional activities previously known to the industry, specified at a high level of generality, to the judicial exception.<sup>8</sup>

*See* Revised Guidance.

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<sup>6</sup> Referred to as “*Revised Step 2A, Prong 1*” in the Revised Guidance (hereinafter “*Step 2A(i)*”).

<sup>7</sup> Referred to as “*Revised Step 2A, Prong 2*” in the Revised Guidance (hereinafter “*Step 2A(ii)*”).

<sup>8</sup> Items (3) and (4) continue to be collectively referred to as “*Step 2B*” of the Supreme Court’s two-step framework, described in *Mayo* and *Alice*.

Step 2A(i) — Abstract Idea

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

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

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

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

Under the Revised Guidance, if the claim does not recite a judicial exception (a law of nature, natural phenomenon, or subject matter within the enumerated groupings of abstract ideas above), then the claim is patent-eligible at *Step 2A(i)*. This determination concludes the eligibility analysis, except in rare situations identified in the Revised Guidance.<sup>9</sup>

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<sup>9</sup> In the rare circumstance in which an Examiner believes a claim limitation that does not fall within the enumerated groupings of abstract ideas should nonetheless be treated as reciting an abstract idea, the procedure described in of the Guidance for analyzing the claim should be followed. *See* Guidance,

However, if the claim recites a judicial exception (i.e., an abstract idea enumerated above, a law of nature, or a natural phenomenon), the claim requires further analysis for a practical application of the judicial exception in *Step 2A(ii)*.

*Step 2A(ii) — Practical Application*

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

The seven identified “practical application” sections of the MPEP,<sup>10</sup> cited in the Revised Guidance under *Step 2A(ii)*, are:

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

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Section III.C.

<sup>10</sup> See MPEP § 2106.05(a)–(c), (e)–(h). Citations to the MPEP herein refer to revision [R-08.2017].

Exception

- (6) MPEP § 2106.05(g) Insignificant Extra-Solution Activity
- (7) MPEP § 2106.05(h) Field of Use and Technological Environment

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

*Step 2B — “Inventive Concept” or “Significantly More”*

Under our precedent, it is possible that a claim that does not “integrate” a recited judicial exception under *Step 2A(ii)* is nonetheless patent eligible. For example, the claim may recite additional elements that render the claim patent eligible even though a judicial exception is recited in a separate claim element.<sup>11</sup> The Federal Circuit has held claims eligible at the second step of the *Alice/Mayo* test (USPTO *Step 2B*) because the additional elements recited in the claims provided “significantly more” than the recited judicial exception (e.g., because the additional elements were unconventional in combination).<sup>12</sup> Therefore, if a claim has been determined to be directed to a judicial exception under *Revised Step 2A*, we must evaluate the additional elements individually and in combination under

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<sup>11</sup> See, e.g., *Diehr*, 450 U.S. at 187.

<sup>12</sup> See, e.g., *Amdocs (Israel), Ltd. v. Openet Telecom, Inc.*, 841 F.3d 1288, 1300, 1304 (Fed. Cir. 2016); *BASCOM Global Internet Servs., Inc. v. AT&T Mobility LLC*, 827 F.3d 1341, 1349–52 (Fed. Cir. 2016); *DDR Holdings, LLC v. Hotels.com, L.P.*, 773 F.3d 1245, 1257–59 (Fed. Cir. 2014).

*Step 2B* to determine whether they provide an inventive concept (i.e., whether the additional elements amount to significantly more than the exception itself).<sup>13</sup>

Under the Revised Guidance, we must consider in *Step 2B* whether an additional element or combination of elements: (1) “Adds a specific limitation or combination of limitations that are not well-understood, routine, conventional activity in the field, which is indicative that an inventive concept may be present;” or (2) “simply appends well-understood, routine, conventional activities previously known to the industry, specified at a high level of generality, to the judicial exception, which is indicative that an inventive concept may not be present.” *See* Revised Guidance, III.B.<sup>14</sup>

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<sup>13</sup> The patent eligibility inquiry may contain underlying issues of fact. *Mortg. Grader, Inc. v. First Choice Loan Servs. Inc.*, 811 F.3d 1314, 1325. (Fed. Cir. 2016). In particular, “[t]he question of whether a claim element or combination of elements is well-understood, routine and conventional to a skilled artisan in the relevant field is a question of fact.” *Berkheimer v. HP Inc.*, 881 F.3d 1360, 1368 (Fed. Cir. 2018).

<sup>14</sup> In accordance with existing *Step 2B* guidance, an Examiner’s finding that an additional element (or combination of elements) is well understood, routine, conventional activity must be supported with at least one of the four specific types of evidence required by the USPTO *Berkheimer* Memorandum, as shown above. For more information concerning evaluation of well-understood, routine, conventional activity, *see* MPEP § 2106.05(d), as modified by the USPTO *Berkheimer* Memorandum (USPTO Commissioner for Patents Memorandum dated Apr. 19, 2018, “Changes in Examination Procedure Pertaining to Subject Matter Eligibility, Recent Subject Matter Eligibility Decision (*Berkheimer v. HP, Inc.*)” (hereinafter “*Berkheimer Memo*”).

In the *Step 2B* analysis, an additional element (or combination of elements) is not well-understood, routine or conventional unless the examiner finds an evidentiary basis, and expressly supports a rejection in writing with, one or more of the following:

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

*See Berkheimer Memo.*

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

- (a) Adds a specific limitation or combination of limitations that are not well-understood, routine, conventional activity in the field, which is indicative that an inventive concept may be present; or
- (b) simply appends well-understood, routine, conventional activities previously known to the industry, specified at a high level of generality, to the judicial exception, which is indicative that an inventive concept may not be

present.

Revised Guidance; *see Berkheimer Memo*.

If the Examiner or the Board determines under *Step 2B* that the element (or combination of elements) amounts to significantly more than the exception itself, the claim is eligible, thereby concluding the eligibility analysis.

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

## ANALYSIS

### *Step 1*

Claim 1 is a method (process) claim by reciting one of the enumerated categories of eligible subject matter in 35 U.S.C. § 101. Therefore, the issue before us is whether it is directed to a judicial exception without significantly more. Based upon our *de novo* review<sup>15</sup> of the record in light of recent Director Policy Guidance<sup>16</sup> with respect to patent-eligible subject matter rejections under 35 U.S.C. § 101, we reverse the rejection of Claims 49–66.

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<sup>15</sup> “Whether a claim is drawn to patent-eligible subject matter is an issue of law that we review *de novo*.” *SiRF Tech., Inc. v. Int’l Trade Comm’n*, 601 F.3d 1319, 1331 (Fed. Cir. 2010).

<sup>16</sup> USPTO, *2019 Revised Patent Subject Matter Eligibility Guidance*, 84(4) Fed. Reg. 50–57 (January 7, 2019) (“Revised Guidance”).

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

The Examiner finds the claims are directed to the abstract idea of handling messages of beyond a threshold size. Final Act. 5. The Examiner analogizes the claims to those of *Electric Power Group, LLC v. Alstom S.A.*, 830 F.3d 1350 (2016) finding they relate to collecting, analyzing, and displaying information without more. *Id.*

Appellants contend the claims provide an improvement to a computer technology. App. Br. 18.

The preamble of Claim 49 recites: “A computer-implemented method within a first messaging computer system configured to interact with a shared storage device separate from the first messaging computer system, comprising.” Table I compares the remaining limitations of Claim 49 to the categories of abstract ideas set forth in the Revised Guidance.

<b>Claim 49</b>	<b>Revised Guidance</b>
[a] <sup>17</sup> transmitting, by a first application within the first messaging computer system, a message to the shared storage device;	An extra-solution activity data-gathering step. <i>See Rev. Guid. 55, n. 30.</i>
[b] intercepting, prior to being received into the shard storage device, the message;	An extra-solution activity data-gathering step. <i>See Rev. Guid. 55, n. 30.</i>
[c] generating, responsive to a size of the message having exceeded a predetermined	Mathematical concepts—mathematical relationships, mathematical formulas or equations,

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<sup>17</sup> Step designators, e.g., “[a]” were added to facilitate discussion.

threshold, a pointer for the message;	mathematical calculations. Rev. Guid. 52.
[d] storing the pointer in the shared storage device; and	An extra-solution activity step. See Rev. Guid. 55, n. 30.
[e] storing the message in a first log owned by the first messaging application,	An extra-solution activity step. See Rev. Guid. 55, n. 30.
[f] wherein the first log is accessible by a second messaging application within a second messaging computer system separate from the first messaging computer system, and	A characterization of a computer log unrelated to a Guidance classification of an abstract idea.
[g] [wherein] access rights to the first log by the first messaging application are greater than access rights to the first log by the second messaging application.	A characterization of a computer log unrelated to a Guidance classification of an abstract idea.

Thus, under Step 2A(i), we find limitation [c] recites a step which may fit within the Revised Guidance category of “mathematical concepts.”

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

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

(b) evaluating those additional elements individually and in combination to determine whether they integrate the exception into a practical application. The Revised Guidance is “designed to more accurately and consistently identify claims that recite a practical application of a judicial exception [] and thus are not ‘directed to’ a judicial exception.” Revised Guidance, 53.

For the reasons which follow, we conclude that Appellants’ claims integrate the judicial exception into a practical application.

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

“In determining patent eligibility, examiners should consider whether the claim ‘purport(s) to improve the functioning of the computer itself’” or “any other technology or technical field.” MPEP § 2106.05(a).

With respect to technological improvements, Appellants contend that the state of the art at the time of the invention provided “a mechanism to store shared messages using a coupling facility comprising an associated queue as the shared storage.” Spec., ¶ 2. Appellants argue “the relative cost of such storage makes it use for storing large messages prohibitive.” App. Br. 22 (citing Spec., ¶ 4). Appellants contend their claimed solution which involves storage of a pointer instead of an over-size message and differential access by messaging applications to various logs owned by the applications, is an improvement over the prior art Flaherty. App. Br. 22–23. Appellants note Flaherty was specifically referenced in the Specification in order to point out the technical improvement thereover. *Id.*

Appellants argue, analogously to *McRo*, that the claimed invention represents an improvement over the teachings of the prior art. Appr. Br. 23.

“As described within Appellants’ specification, the provision of different logs owned by separate messaging application yet accessible by both messaging applications ‘allows data to be recovered from a log associated with a failed messaging application, by another messaging application.’” *Id.* Appellants further argue “[t]he read [of a log by one messaging application] can occur whilst the other messaging application continues to write to the log.” *Id.*

The Examiner acknowledges the Specification discloses the invention as an improvement to computer technology, but finds Appellants have not described the improvement in the claims. Ans. 16.

Contrary to the Examiner’s finding, the *Enfish* Court found:

our conclusion that the claims are directed to an improvement of an existing technology is bolstered by the specification's teachings that the claimed invention achieves other benefits over conventional databases, such as increased flexibility, faster search times, and smaller memory requirements.

*Enfish, LLC v. Microsoft Corp.*, 822 F.3d 1327, 1337 (2016).

We find Appellants’ claims integrate the judicial exception into a practical application by providing “[i]mprovements to the Functioning of a Computer or To Any Other Technology or Technical Field.” MPEP § 2106.05(a). We, therefore, find the claims are not directed to an abstract idea and recite eligible subject matter under 35 U.S.C. § 101.

CLAIMS 49–66: OBVIOUSNESS OVER  
FLAHERTY, MILLER, IMAMURA, AND ROOKE.

Independent Claim 49 recites, *inter alia*, “a first log owned by the first messaging application.” Independent Claims 55 and 61 recite commensurate limitations.

To teach “a first log owned by the first messaging application,” the Examiner finds Flaherty teaches: “[o]nce the server 16a has determined that the message that will be put on the queue exceeds a predetermined threshold, the message 34 is written immediately to the database 30 and committed.” Final Act 7 (quoting Flaherty, ¶ 27).

Appellants contend the cited passage of Flaherty may teach “a log associated with a first messaging application,” as recited in the claim as originally filed, but Flaherty fails to the amended language, i.e., “a first log *owned* by the first messaging application.” (emphasis added). App. Br. 25–26. Appellants also contend that Flaherty does not disclose “access rights to the first log by the first messaging application are greater than access rights to the first log by the second application” as recited in claim 49, because each of the servers in Flaherty has equal access rights to the shared database, so as to be able to both read and write to the database. App. Br. 26–27.

The Examiner disagrees in view of the finding under § 112(2<sup>nd</sup>) wherein the messaging application that has write access to a log is interpreted as owning the association to that log. Ans. 18. The Examiner finds Flaherty teaches server 16a owns the first log by disclosing server 16a writes message 34 to database (i.e., log) 30. *Id.* (citing Flaherty, ¶ 27).

Appellants reply Flaherty discloses that each of servers 16a and 16b has write access to database 30 thus Flaherty fails to teach ownership of a log in view of differential access to that log. Reply 13. We agree with Appellants that the prior art fails to teach a log is owned by a messaging application. *See* our prior discussion of ownership in context of the rejection under § 112(2<sup>nd</sup>), *supra*.

Appellants also contend that the Examiner must give patentable weight to the claim term “greater access” (Reply 14), and that all of the servers within Flaherty’s system have equal access to the shared database (Reply 15–16). We agree with Appellants. The section of Flaherty cited by the Examiner discloses that “[*e*]ach server . . . is arranged to access the database 30.” Final Act. 7 (citing Flaherty ¶ 33 (emphasis added)). The Examiner has not explained how the servers in Flaherty, which each have the same read and write access to the database, teach “access rights to the first log by the first messaging application are greater than access rights to the first log by the second application” as claimed.

In view of the foregoing, we decline to sustain the rejection of Claims 49–66 under 35 U.S.C. § 103.

#### DECISION

The rejection of Claims 49–66 under 35 U.S.C. § 101 is REVERSED.

The rejection of Claims 49–66 under 35 U.S.C. § 103 is REVERSED.

The rejection of Claims 49–66 under 35 U.S.C. § 112, first and second paragraphs, is REVERSED.

Appeal 2018-008901  
Application 12/108,545

REVERSED