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| APPLICATION NO.                                                                                             | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-------------------------------------------------------------------------------------------------------------|-------------|----------------------|---------------------|------------------|
| 15/257,109                                                                                                  | 09/06/2016  | Venkata V. Gadepalli | END920160238US1     | 5204             |
| 145260                                                                                                      | 7590        | 10/04/2019           | EXAMINER            |                  |
| IBM CORPORATION - ENDICOTT (JVL)<br>C/O LESLIE A. VAN LEEUWEN<br>6123 PEBBLE GARDEN CT.<br>AUSTIN, TX 78739 |             |                      | SAINT CYR, LEONARD  |                  |
|                                                                                                             |             |                      | ART UNIT            | PAPER NUMBER     |
|                                                                                                             |             |                      | 2658                |                  |
|                                                                                                             |             |                      | NOTIFICATION DATE   | DELIVERY MODE    |
|                                                                                                             |             |                      | 10/04/2019          | 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* VENKATA V. GADEPALLI, TRUDY L. HEWITT,  
ASHOK K. IYENGAR, and JAMES M. MORENO

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Appeal 2018-008589  
Application 15/257,109  
Technology Center 2600

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Before ROBERT E. NAPPI, JOHNNY A. KUMAR, and  
MATTHEW J. McNEILL, *Administrative Patent Judges*.

KUMAR, *Administrative Patent Judge*.

DECISION ON APPEAL

Appellants<sup>1</sup> appeal under 35 U.S.C. § 134(a) from the Examiner's decision to reject claims 1–3, 5–10, 12–17, and 19–20.<sup>2</sup> We have jurisdiction under 35 U.S.C. § 6(b). We AFFIRM.

STATEMENT OF THE CASE

Appellants' invention relates to identifying an idiom, such as a group of words having a particular meaning that may not be discernable from individual words that constitute the group of words, in content destined for a recipient. Spec. ¶¶ 2–3. The invention uses recipient-related data to

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<sup>1</sup> Appellants identify the real party in interest as International Business Machines Corporation. App. Br. 2.

<sup>2</sup> Claims 4, 11, and 18 were previously canceled.

determine if the recipient is likely to understand the idiom. Spec. ¶¶ 2, 6–7.  
If the recipient is unlikely to understand the idiom, the content can be modified prior to being delivered to the recipient. *Id.*

### *Exemplary Claim*

1. A method implemented by an information handling system that includes a processor and a memory accessible by the processor, the method comprising:
  - identifying an idiom in content destined to a recipient;
  - searching one or more network accessible data stores of recipient-related knowledge, wherein at least one of the data stores is inaccessible by a sender of the content;
  - identifying, as a result of the searching, zero or more encounters by the recipient of the idiom;
  - based on the identifying, determining a confidence level of the recipient's understanding of the identified idiom;
  - modifying the content based on the determined confidence level; and
  - transmitting the modified content to the recipient.

Claims Appendix 2.<sup>3</sup>

### REJECTIONS

Claims 1–3, 5–10, 12–17, and 19–20 are rejected under 35 U.S.C. § 101, as being directed to a judicial exception, without significantly more. Final Act. 4; Ans. 7–8.<sup>4</sup>

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<sup>3</sup> In the Supplemental Appeal Brief, the Claims Appendix was provided separate page numbering from the remainder of the Supplemental Appeal Brief. Citations to the Claims Appendix are hereinafter referenced as (“Claims Appendix”).

<sup>4</sup> Throughout this Opinion, we refer to (1) the Final Office Action delivered October 3, 2017 (“Final Act.”); (2) the Supplemental Appeal Brief filed April 4, 2018 (“App. Br.”); (3) the Examiner’s Answer delivered June 28, 2018 (“Ans.”); and (4) the Reply Brief filed August 28, 2018 (“Reply Br.”).

Claims 1–3, 5–10, 12–17, and 19–20 are rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent Publication No. 2005/0080643 A1 to McLennan et al. (hereinafter “McLennan”) in view of U.S. Patent Publication No. 2016/0224540 A1 to Stewart et al. (hereinafter “Stewart”). Final Act. 6–9; Ans. 8–9.

### THE INELIGIBILITY REJECTION

The Examiner determines the “claimed steps of algorithm/mathematical relation of identifying idiom of a transmitted message and modifying the content of the message based on a confidence level of the recipient’s understanding the identified idiom, and hence the claims are considered to be an abstract idea.” Ans. 7–8. The Examiner further determines that the additional elements including (1) a *processor*; (2) a *memory*; and (3) *data stores* do not add significantly more than the abstract idea, but merely recite generic computing components. Ans. 8.

Appellants argue the claims are not directed to an abstract idea, but rather, the claimed invention recites an improvement of computer technology, namely electronic communications. App. Br. 7. Appellants add, the claimed invention is “inextricably tied to computer technology” because it is directed to “performing identification and modification of idioms found in electronic communication between a sender and receiver”. App. Br. 7–8. The Appellants additionally argue the claimed invention does not monopolize or pre-empt the relevant technological field, and thus, the eligibility of claimed invention is self-evident. App. Br. 8–9.

### ISSUE

Under § 101, has the Examiner erred in rejecting the claimed invention as directed to ineligible subject matter? This issue turns on whether the claims are directed to an abstract idea and, if so, whether additional elements recited—considered individually and as an ordered combination—transform the nature of the claims into a patent-eligible application of that abstract idea.

### PRINCIPLES OF LAW

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. *See, e.g., Alice*, 573 U.S. at 216 (citation omitted).

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*. *Id.* at 217–18 (citing *Mayo Collaborative Servs. v. Prometheus Labs., Inc.*, 566 U.S. 66, 75–77 (2012)). 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 rubber products” (*Diamond v. Diehr*, 450 U.S. 175, 191 (1981)); “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 176; *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.”). That said, 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.*

In January 2019, the USPTO published revised guidance on the application of § 101. *See* 2019 Revised Patent Subject Matter Eligibility Guidance, 84 Fed. Reg. 50 (Jan. 7, 2019) (“Revised Guidance”). Under that 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); 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) (9th ed. Rev. 08. 2017, Jan. 2018)).

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

- (3) adds a specific limitation beyond the judicial exception that is not well-understood, routine, and 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.

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

### THE INELIGIBILITY ANALYSIS

Independent claims 1, 8, and 15 recite analogous limitations. Appellants present a unitary argument directed towards independent claims 1, 8, and 15 together. App. Br. 7, 9. Accordingly, we select claim 1 for discussion as representative of the rejected claims. We refer to the rejected independent claims collectively herein as “claim 1.” *See 37 C.F.R. § 41.37(c)(1)(iv); In re King, 801 F.2d 1324, 1325 (Fed. Cir. 1986).*

We must determine whether the claimed invention is directed to a judicial exception, namely an abstract idea. *See Alice, 573 U.S. at 217.* To this end, we determine (1) whether claimed invention recites a judicial exception (Revised Guidance Step 2A – Prong 1) and, if so, (2) whether the identified judicial exception is integrated into a practical application (Revised Guidance Step 2A – Prong 2). *See Revised Guidance, 84 Fed. Reg. at 52–55.*

#### *Revised Guidance Step 2A – Prong 1*

To determine whether a claim recites an abstract idea, we (1) identify the claim’s specific limitations that recite an abstract idea, and (2) determine whether the identified limitations fall within certain subject matter

groupings, namely (a) mathematical concepts;<sup>5</sup> (b) certain methods of organizing human activity;<sup>6</sup> or (c) mental processes.<sup>7</sup>

Here, apart from (1) a *processor*; (2) a *memory*; and (3) *data stores* recited in independent claim 1 (Claims Appendix 2), the claimed invention's recited limitations, which collectively are directed to identifying and modifying content from a sender to a recipient based on recipient related data, fit squarely within at least one of the above categories of the agency's guidelines.

First, the claimed invention recites steps directed to certain methods of organizing human activity, including managing interactions between people following rules or instructions, such as managing content between a sender and a recipient. For example, claim 1 recites (1) "*identifying an idiom in content destined to a recipient*"; (2) "*searching . . . recipient-related knowledge . . . inaccessible by a sender of the content*"; (3) "*identifying, as a result of the searching, zero or more encounters by the recipient of the idiom*"; (4) "*based on the identifying, determining a*

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<sup>5</sup> Mathematical concepts include mathematical relationships, mathematical formulas or equations, and mathematical calculations. *See Revised Guidance*, 84 Fed. Reg. at 52.

<sup>6</sup> Certain methods of organizing human activity include 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 Revised Guidance*, 84 Fed. Reg. at 52.

<sup>7</sup> Mental processes are concepts performed in the human mind including an observation, evaluation, judgment, or opinion. *See Revised Guidance*, 84 Fed. Reg. at 52.

*confidence level of the recipient's understanding of the identified idiom*"; (5) *modifying the content based on the determined confidence level*; and (6) *“transmitting the modified content to the recipient.”* which involve certain methods of organizing human activity including managing interactions between people following rules or instructions.

The relevant case law establishes limitations (1)–(6) recite an abstract idea. *Cf. Intellectual Ventures I LLC v. Symantec Corp.*, 838 F.3d 1307 at 1313 (Fed. Cir. 2016) (“receiving e-mail (and other data file) identifiers, characterizing email based on the identifiers, and communicating the characterization – in other words, filtering files/e-mail –is an abstract idea”); *see also* MPEP § 2106.04(a)(2), II (“Certain Methods of Organizing Human Activity”, Section D, example v, citing *Symantec*); *Dealertrack v. Huber*, 674 F.3d 1315 at 1333 (Fed. Cir. 2012) (“receiving data from one source, selectively forwarding the data, and forwarding reply data to the first source” constituted certain methods of organizing human activities, which is a type of abstract idea); MPEP § 2106.04(a)(2), II (“Certain Methods of Organizing Human Activity”, Section A, citing *Dealertrack*). Similar to the data gathering (1)–(3) and selective transmission of content based on user characteristics (4)–(6) shown above, our reviewing court in *Intellectual Ventures I LLC v. Capital One Bank (USA)*, 792 F.3d 1363 (Fed. Cir. 2017) found that retrieving data from a user profile and tailoring content transmitted to the user based on the “the user’s personal characteristics” constituted certain methods of organizing human activities, which is a type of abstract idea. 792 F.3d 1363, 1369–1370; *see also* MPEP § 2106.04(a)(2), II (“Certain Methods of Organizing Human Activity”, Section C, citing *Capital One Bank (USA)*).

Specifically, limitations (1)–(3) recite gathering data such as recipient related data through *searching data stores* and *identifying content*, in furtherance of organizing human activity, namely, managing an interaction between a sender and a recipient. In *Symantec*, our reviewing court found claim limitations reciting

*identifying characteristics of data files comprising: receiving, on a processing system, file content identifiers for data files from a plurality of file content identifier generator agents*

(emphasis added) constitute certain methods of organizing human activities, which is a type of abstract idea related to retrieving data using data file identifiers. *See Symantec*, 838 F.3d 1307 at 1313; *see also Content Extraction & Transmission LLC v. Wells Fargo Bank, Nat’l Ass’n*, 776 F.3d 1343, 1345–49 (Fed. Cir. 2014) (holding ineligible claims reciting (1) receiving output representing diverse types of hard copy documents from an automated digitizing unit, and (2) storing information from those documents into memory); *CyberSource Corp. v. Retail Decisions, Inc.*, 654 F.3d 1366, 1372 (noting that limitations reciting obtaining information about transactions that have used an Internet address identified with a credit card transaction can be performed by a human who simply reads records of Internet credit card transactions from a pre-existing database).

Furthermore, limitations (4)–(6) recite using the data gathered in limitations (1)–(3) to determine that wanted and unwanted content may be defined according to recipient related data and sending content to the recipient based on the determination. Our reviewing court has found that email filtering with user–set criteria constitutes certain methods of organizing human activities, which is a type of abstract idea. *See Intellectual Ventures I LLC v. Symantec Corp.*, 838 F.3d 1307 at 1313,

1317–1319 (Fed. Cir. 2016); *see also* MPEP § 2106.04(a)(2), II (“Certain Methods of Organizing Human Activity”, Section D, example v, citing *Symantec*). Additionally, user customizable content filtering of information retrieved from the Internet was similarly found to constitute certain methods of organizing human activities, which is a type of abstract idea. *See BASCOM Global Internet Services, Inc. v. AT&T Mobility LLC*, 827 F.3d 1341, 1345–1346 (Fed. Cir. 2016); *see also* MPEP § 2106.04(a)(2), II (“Certain Methods of Organizing Human Activity”, Section C, example i, citing *BASCOM*). These cases are relevant because user–customization means that wanted and unwanted content may be defined according to user related data. Retrieval of information defining the wanted and unwanted content in a multi-user environment requires use of the user related data. *See, e.g., BASCOM, supra*. Although the claimed invention involves modifying content rather than blocking or allowing access to requested content like these cases, the use of recipient information to modify content transmitted to a recipient, i.e., steps (4)–(6), similarly recites a certain method of organizing human activity that is an abstract idea.

Furthermore, the Specification indicates (4) “*determining a confidence level of the recipient's understanding of the identified idiom*” under an aspect of the invention, can be carried out by a data comparison, such as a key word search of the idiom in a recipient related database. Spec. ¶¶ 39–40. If the idiom is found, a higher “confidence level of understanding” occurs, whereas, if the idiom is not found, a lower “confidence level of understanding” results. Spec. ¶¶ 32, 40. Our reviewing court in *Capital One Bank (USA)* reviewed analogous claim limitations and determined tailoring of content transmitted to a recipient based on “matching

personal characteristics in a user profile” with “information identifiers” is a fundamental practice long prevalent in our system, i.e., a certain method of organizing human activity that is an abstract idea. 792 F.3d 1363, 1369–1370 (internal citations and quotations omitted); *see also* MPEP § 2106.04(a)(2), II (“Certain Methods of Organizing Human Activity”, Section C, citing *Capital One Bank (USA)*);

We add that the above-noted recited functions of (1) “*identifying an idiom in content destined to a recipient*”, and (4) “*determining a confidence level of the recipient's understanding of the identified idiom*” can also typically be performed entirely mentally by merely *thinking* about these identifications and determinations, or writing them down—both involving mere observation and logical reasoning. *Cf. CyberSource*, 654 F.3d at 1372 (noting that a recited step that utilized a map of credit card numbers to determine the validity of a credit card transaction could be performed entirely mentally by merely using *logical reasoning* to identify a likely instance of fraud by merely *observing* that numerous transactions using different credit cards all originated from the same IP address). Additionally, mental processes remain unpatentable even when automated to reduce the burden on the user of what once could have been done with pen and paper. *See CyberSource*, 654 F.3d at 1375 (“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*.”).

Therefore, the recited *idiom identification* and *determination of a confidence level* functions also fall squarely within the mental processes category of the agency’s guidelines and, therefore, recites an abstract idea

for that additional reason. *See* Guidance, 84 Fed. Reg. at 52 (listing exemplary mental processes including observation and evaluation).

Accordingly, limitations (1)–(6) reciting gathering and identifying data to filter or tailor content transmitted to a recipient based on recipient related data falls squarely within certain methods of organizing human activity category of the agency’s guidelines and, therefore, recite an abstract idea. *See* Revised Guidance, 84 Fed. Reg. at 52 (listing exemplary methods of organizing human activity, including managing personal behavior or relationships following rules or instructions).

*Revised Guidance Step 2A – Prong 2*

Although claim 1 recites an abstract idea categorized as a certain method of organizing human activity, we nevertheless must still determine whether the abstract idea is integrated into a practical application, namely whether the claim applies, relies on, or uses the abstract idea in a manner that imposes a meaningful limit on the abstract idea, such that the claim is more than a drafting effort designed to monopolize the abstract idea. *See* Revised Guidance, 84 Fed. Reg. at 54–55. To this end, we (1) identify whether there are any additional recited elements beyond the abstract idea, and (2) evaluate those elements individually and collectively to determine whether they integrate the exception into a practical application. *See id.*

Here, we agree with the Examiner’s determination that the additional elements beyond the abstract idea recited in claim 1 are (1) a *processor*; (2) a *memory*; and (3) *data stores* (Ans. 8), but these additional elements do not

integrate the abstract idea into a practical application when reading the claimed invention as a whole.

First, we find unavailing Appellants’ conclusory argument merely asserting “the claim steps cannot be performed manually and, instead, the claim is directed to an improvement of computer technology, namely electronic communications” (App. Br. 7) because Appellants provide no further substantive explanation or evidence in support. We afford such conclusory attorney argument little weight. *In re Geisler*, 116 F.3d 1465, 1470 (Fed. Cir. 1997). *See also Enzo Biochem, Inc. v. Gen-Probe, Inc.*, 424 F.3d 1276, 1284 (Fed. Cir. 2005) (“Attorney argument is no substitute for evidence.”). Furthermore, the Specification indicates the improvement relates to the abstract idea, as noted *supra*, of “customizing translations” between a sender of content and a recipient, rather than a technological improvement. Spec. ¶ 1. Moreover, Appellants do not assert, and the claims do not reflect *how* computer technology is improved. When a claim directed to an abstract idea contains no restriction on *how* an asserted improvement is accomplished and the asserted improvement is not described in the claim, then the claim does not become patent eligible on the basis of the asserted improvement. *See Intellectual Ventures I LLC v. Symantec Corp.*, 838 F.3d 1307, 1316 (Fed. Cir. 2016).

Second, we disagree with Appellants’ argument that the claimed invention is “inextricably tied to computer technology” because it is directed to “performing identification and modification of idioms found in *electronic communication* between a sender and receiver” (emphasis original) (App. Br. 7–8) for at least the reason that claim 1 does not recite “electronic communication”. Moreover, assuming *arguendo*, claim 1 required

identifying and modifying “electronic communication” between a sender and receiver, the claimed invention remains silent regarding specific limitations directed to an improved computer system, processor, memory, network, database, or Internet. Therefore, we find Appellants’ claimed invention does not provide a solution “necessarily rooted in *computer technology* in order to overcome a problem specifically arising in the realm of computer networks,” such as considered by the court in *DDR Holdings LLC v. Hotels.com, L.P.*, 773 F.3d 1245, 1257 (Fed. Cir. 2014) (emphasis added).

Rather, the additional elements of (1) a *processor*; (2) a *memory*; and (3) *data stores* are merely generic computer components used as a tool to implement the abstract idea recited in claim 1. Spec. ¶ 13 (“general purpose computer”), ¶ 16 (“computing device 104 . . . comprising one or more *processors* and one or more *memories*, and potentially any other computing device elements *generally known in the art* including buses, *storage devices*, communication interfaces, and the like” (italics added)).

Section 2106.05(c) of the MPEP guides: “Another consideration when determining whether a claim recites significantly more is whether the claim effects a transformation or reduction of a particular article to a different state or thing.” “[T]ransformation and reduction of an article ‘to a different state or thing’ is the clue to patentability of a process claim that does not include particular machines.” *Bilski v. Kappos*, 561 U.S. 593, 658 (2010) (quoting *Gottschalk v. Benson*, 409 U.S. 63, 70, 175 (1972)). If such a transformation exists, the claims are likely to be significantly more than any recited judicial exception. *Bilski* emphasizes that although the

transformation of an *article* is an important clue, it is not a stand-alone test for eligibility. MPEP § 2106.05(c).

To the extent Appellants intend to assert the claims on appeal transform data by “performing identification and modification of idioms found in electronic communication between a sender and receiver” (App. Br. 7–8), our reviewing court guides that, if not appropriately limiting, “[t]he mere manipulation or reorganization of electronic data, however, does not satisfy the transformation prong.” *CyberSource Corp. v. Retail Decisions, Inc.*, 654 F.3d 1366, 1375 (Fed. Cir. 2011) (emphasis added).

Additionally, as discussed above, limitation (6), reciting “*transmitting the modified content to the recipient*” is not only reciting an abstract idea of certain methods of organizing human activity using generic computing components, but this transmitting function is alternatively insignificant post-solution activity and, therefore, does not integrate the exception into a practical application for that additional reason. *See Flook*, 437 U.S. at 590 (insignificant post-solution activity held insufficient to impart patentability); *Electric Power Group, LLC v. Alstom S.A.*, 830 F.3d 1350, 1354–55 (“merely presenting the results of abstract processes of collecting and analyzing information, without more . . . is abstract as an ancillary part of such collection and analysis”); *see also CyberSource*, 654 F.3d at 1371 (discussing *Flook*). *Accord* Revised Guidance, 84 Fed. Reg. at 55 (citing MPEP § 2106.05(g)). Generic recitations of extra-solution activity, as in limitation (6), weigh against a finding that the claim effects a transformation or reduction of a particular article to a different state or thing. *See* MPEP § 2106.05(c). Therefore, we conclude the method of claim 1 fails to satisfy

the transformation prong of the *Bilski* machine-or-transformation test. *See Id.*

Nor do Appellants argue that the method claims on appeal are tied to a particular machine. *See* MPEP § 2106.05(b) “Particular Machine.” Arguments not made are waived. *See* 37 C.F.R. § 41.37(c)(1)(iv).

Third, we find Appellants’ argument alleging that because the claimed invention does not “tie-up” any judicial exception or “restrict others from practicing every conceivable method of electronic communication”, the claimed invention is “suitable for Streamline Eligibility Analysis” unavailing. App. Br. 8–9. Our reviewing court provides applicable guidance: “While 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); *Ultramercial*, 722 F.3d at 1346. Furthermore, Streamlined Analysis may be used only “when the eligibility of the claim is self-evident e.g., because the claim clearly improves a technology or computer functionality”. MPEP § 2106.06. The MPEP further guides that, “if there is doubt as to whether the applicant is effectively seeking coverage for a judicial exception itself, the full eligibility analysis . . . should be conducted”. *Id.* Here, as noted *supra*, the claimed invention does not recite an improvement in computer related technology and merely uses generic computer components to carry to implement the abstract idea.

Additionally, dependent claims 2–3, 5–7, 9–10, 12–14 16–17, and 19–20 are not argued separately with sufficient particularity. *See* App. Br. 10; *see also* 37 C.F.R. § 41.37(c)(1)(iv). For the above-stated reasons, we determine the additional elements recited in the claimed invention, beyond

the judicial exceptions, whether considered alone or in combination, do not integrate the abstract idea into a practical application.

*Revised Guidance, Step 2B*

Under the Revised Guidance, if a claim: (1) recites a judicial exception, and (2) does not integrate that exception into a practical application, 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. *See* Revised Guidance, 84 Fed. Reg. at 56.

Because we determine claim 1 is “directed to” an abstract idea that has not been integrated into a practical application, we consider whether claim 1 recites an “inventive concept.” The Examiner determined that the additional elements include a *processor*; (2) a *memory*; and (3) *data stores*” as recited in claim 1. Ans. 8. The Examiner further determined claim 1, viewed as a whole, does not recite an inventive concept because the additional elements in the claim do not amount to “significantly more” than an abstract idea, citing *Alice*. Final Act. 4; Ans. 8.

We agree. The additional elements including a *processor*; (2) a *memory*; and (3) *data stores*” are recited in claim 1 at a high level of generality, and the written description indicates that these elements are generic computer components generally known in the art. *See, e.g.*, Spec. ¶ 13 and ¶ 16. Using generic computer components to perform abstract ideas does not provide the necessary inventive concept. *See Alice*, 573 U.S.

at 223 (“[T]he mere recitation of a generic computer cannot transform a patent-ineligible abstract idea into a patent-eligible invention.”). Thus, these elements, taken individually or together, do not amount to “significantly more” than the abstract ideas themselves.

Appellants contend various elements recited in the claims provide a “unique, and non-obvious method” for “identifying idioms in electronic content that are likely to be misunderstood by a recipient and modifying the idiom accordingly”. App. Br. 9. However, these elements form parts of the recited abstract ideas and thus are not “additional elements” that “‘transform the nature of the claim’ into a patent-eligible application.” *Alice*, 573 U.S. at 217 (quoting *Mayo*, 566 U.S. at 78); *see also* Revised Guidance, 84 Fed. Reg. at 55 n.24 (“USPTO guidance uses the term ‘additional elements’ to refer to claim features, limitations, and/or steps that are recited in the claim *beyond the identified judicial exception.*” (Emphasis added)). Moreover, Appellants’ arguments are conclusory and unsupported by persuasive evidence and technical reasoning. Additionally, Appellants’ conclusory assertion the limitations of claim 1 are “unique” and “non-obvious” are unavailing since “. . . ‘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.” *Intellectual Ventures I LLC v. Symantec Corp.*, 838 F.3d 1307, 1315 (Fed. Cir. 2016) (quoting *Diehr*, 450 U.S. at 188–89). *See also Synopsys*, 839 F.3d at 1151 (“a claim for a new abstract idea is still an abstract idea. The search for a § 101 inventive concept is thus distinct from demonstrating § 102 novelty”) (emphasis omitted); MPEP § 2106.05 (“Because they are separate and distinct requirements from eligibility,

patentability of the claimed invention under 35 U.S.C. 102 and 103 with respect to the prior art is neither required for, nor a guarantee of, patent eligibility under 35 U.S.C. 101”).

Additionally, we disagree with Appellants arguments that the claim 1 limitation “determining a confidence level of the recipient’s understanding of the identified idiom” constitutes an additional element outside of the abstract idea and that the Examiner failed to set forth a *prima facie* case to support the ineligibility rejection under *Berkheimer v. HP Inc.*, 881 F.3d 1360 (Fed. Cir. 2018) both “in the Office Actions and in the Examiners Answer”. Reply Br. 2–3. In the Final Office Action, the Examiner identifies the limitation “determining a confidence level of the recipient’s understanding of the identified idiom” as part of the abstract idea, carried out using “mere instructions” on an “unspecified, generic computer”. Final Act. 4. In the Answer, the Examiner identified the additional elements as “a processor”, “a memory accessible by the processor” and a “network accessible data store”. Ans. 8. In *Berkheimer*, our reviewing court indicated that at “step two, we . . . determine whether *additional elements* transform the nature of the claim’ into a patent eligible application” (italics added, internal quotations omitted). 881 F.3d 1360 at 1367; *see also Berkheimer Memo*<sup>8</sup>, p. 2 (“the *Berkheimer* decision . . . does provide clarification as to the inquiry into whether an *additional element (or combination of additional*

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<sup>8</sup> Memorandum on *Changes in Examination Procedure Pertaining to Subject Matter Eligibility, Recent Subject Matter Eligibility Decision (Berkheimer v. HP, Inc.)*(Apr. 19, 2018) available at: <https://www.uspto.gov/sites/default/files/documents/memo-berkheimer-20180419.PDF>

*elements*) represents well-understood, routine, conventional activity”  
(emphasis added))

Furthermore, Appellants admit in the specification that each of the additional elements are well-known in the art. Spec. ¶ 16 (“*computing device 104 . . . comprising one or more processors and one or more memories, and potentially any other computing device elements generally known in the art including buses, storage devices, communication interfaces, and the like*” (italics added)). As noted in *Berkheimer*:

[N]ot every § 101 determination contains genuine disputes over the underlying facts material to the § 101 inquiry. *See, e.g., Content Extraction*, 776 F.3d at 1349 (patent owner conceded the argued inventive concept “was a routine function of scanning technology at the time the claims were filed”); *Intellectual Ventures I LLC v. Capital One Bank (USA)*, 792 F.3d 1363, 1370 (Fed. Cir. 2015) (patent owner argued an “interactive interface” is “a specific application of the abstract idea that provides an inventive concept” and did not dispute that the computer interface was generic)

*Berkheimer*, 881 F.3d 1360, 1368.

As a result, considering claim 1 as a whole, we agree with the Examiner and determine that the additional elements recited in the claim do not provide “a specific limitation or combination of limitations that are not well-understood, routine, conventional activity in the field.” Revised Guidance, 84 Fed. Reg. at 56. Rather, these elements “simply append[] well-understood, routine, conventional activities previously known to the industry, specified at a high level of generality.” Revised Guidance, 84 Fed. Reg. at 56. Accordingly, we agree with the Examiner that claim 1 does not have an inventive concept.

Appellants do not present additional arguments with respect to the limitations of dependent claims 2–3, 5–7, 9–10, 12–14, 16–17, and 19–20 are not argued separately with sufficient particularity under 35 U.S.C. § 101. *See* App. Br. 10. For the reasons discussed above, we conclude Appellants’ claims 1–3, 5–10, 12–17, and 19–20 invoke generic computer components merely as a tool in which the computer instructions apply the judicial exception. Accordingly, we sustain the Examiner’s rejection of claims 1–3, 5–10, 12–17, and 19–20 under 35 U.S.C. § 101. Arguments not presented are waived. *See* 37 C.F.R. § 41.37(c)(1)(iv); *see also* 37 C.F.R. § 41.41(b)(2).

## OBVIOUSNESS REJECTION

### ISSUE

Under § 103, has the Examiner erred in rejecting claim 1 by finding that McLellan and Stewart collectively would have taught or suggested the disputed limitations (1) “determining a confidence level of the recipient’s understanding of the identified idiom”; and (2) “identifying, as a result of the searching, zero or more encounters by the recipient of the idiom” as recited in claim 1?

### ANALYSIS

In rejecting claim 1, the Examiner finds the combined teaches of McLellan and Stewart teach or suggest “determining a confidence level of the recipient’s understanding of the identified idiom” Final Act. 7 (citing Stewart ¶¶ 66, 68, FIG. 2).

Appellants argue that the combined teachings of McLellan and Stewart fail to teach or suggest “*determining* whether the *recipient* of the message *understands* the word being sent” (emphasis original). App. Br. 11. Appellants cite ¶ 125 and FIG. 6 of Stewart, adding:

Stewart never teaches or suggests that the dialect trait has to do with anything pertaining to the recipient's understanding of a given word or term. Instead, the personal traits are tied exclusively to the **sender** of the system (with the user being the sender of the message). While the recipient's location is mentioned with regards to the dialect trait, nothing regarding the recipient's understanding of a term, let alone an idiom, is taught or suggested by Stewart[t].

App. Br. 12 (emphasis original).

With regard to disputed limitation (1), at the outset, we note Appellants’ arguments are not commensurate in scope with the claim language because the claims do not require *determining* whether a recipient of a message actually *understands* a word being sent as argued by Appellants (App. Br. 11) for at least the reason that such a determination cannot be known outside of asking the specific person that is the recipient. Rather, the claims recite determining a *confidence level* that the recipient will understand a particular idiom.

Furthermore, as an initial matter of claim construction, we look to the Specification for context regarding the broadest reasonable interpretation (BRI)<sup>9</sup> of the claim term “confidence level” as recited in claim 1. Appellants do not assert a particular definition for “confidence level” and the Specification does not provide any limiting definition of what a “confidence

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<sup>9</sup> We give the contested claim limitations the broadest reasonable interpretation consistent with the Specification. *See In re Morris*, 127 F.3d 1048, 1054 (Fed. Cir. 1997).

level” is. The Specification provides that a *confidence level* encompasses a *likelihood* rather than a function that provides a definitive determination, as argued by Appellants (App. Br. 11):

When a specific recipient is specified then, at predefined process 440, the process performs the Identify Likely Translation Issues . . . [t]his routine analyzes the understanding the recipient has regarding the possible translation issues in order to score the translation issues with confidence levels . . . [i]n addition, predefined process 440 ranks translation issues based on how likely such idioms are understood by recipient . . . . idioms that are likely to be understood by the recipient are provided a high confidence level, while idioms that are likely . . . . misunderstood by the recipient are provided a low confidence level.

Spec. ¶ 32 (underlining and bracketing added).

Accordingly, under a BRI, the aforementioned limitation is properly construed as encompassing “determining a *likelihood* of the recipient’s understanding of the identified idiom”

Additionally, as disclosed paragraph 32 above, the confidence level determination can be based on “translation issues.” Translation issues can arise when a user sending a message a different language than a recipient and the message contains an idiom since “when literally translated into a target language, *might be confusing or misunderstood* when received by the recipient” (italics added). Spec. ¶ 29; *see also* Spec. ¶ 31 (“original content 310, target language 320 . . . process 420 . . . performs the Identify Possible Translation Issues”). Furthermore, a translation issue between a sender and a recipient can be the *sole basis* for determining there is a low confidence a recipient will understand the idiom. Spec. ¶ 32.

Accordingly, we agree with the Examiner that the citations to Stewart (¶¶ 66–68), provided in the Final Office Action on page 7, teach or suggest

the disputed limitation since Stewart also identifies the language of the sender (“user”) and the recipient in order to determine if a language barrier is *likely* to cause the recipient to misunderstand an idiom sent in a message between the sender and recipient:

In response to the message recipient having *a different native language than the user*, the nuance module 204 may *take into account the language barrier* when *determining* a dialectal nuance. For example, the dialectal nuance may cause the dictionary module 206 to select a word recognition dictionary that includes easily translatable terms and that *avoids idioms* and colloquialisms that *may be unfamiliar* to the message recipient, *in response to a language barrier existing between the user and the message recipient*.

Stewart ¶ 66 (emphasis added); *See also* Stewart ¶ 76 (in response to message recipient having a different native language . . . identify that the user input an idiom . . . which [may] be confusing to a non–native speaker . . . suggest an alternative term or phrase that is more easily translatable in order to improve communication between the user and the message recipient”).

With respect to disputed limitation (2), in the Reply Brief (pages 4 through 5), Appellants present for the first time the new argument that Landau does not teach or suggest the claimed “identifying, as a result of the searching, zero or more encounters by the recipient of the idiom.” This is a new argument made for the first time in the Reply Brief. In the absence of a showing of good cause by Appellants, we decline to consider an argument raised for the first time in the Reply Brief. This is because, as the Examiner has not been provided a chance to respond, these arguments would be deemed waived. *See* 37 C.F.R. § 41.41(b)(2) (2016); *In re Hyatt*, 211 F.3d 1367, 1373 (Fed. Cir. 2000) (noting that an argument not first raised in the

brief to the Board is waived on appeal); *Ex parte Nakashima*, 93 USPQ2d 1834, 1837 (BPAI 2010) (explaining that arguments and evidence not timely presented in the Principal Brief, will not be considered when filed in a Reply Brief, absent a showing of good cause explaining why the argument could not have been presented in the Principal Brief); *Ex parte Borden*, 93 USPQ2d 1473, 1477 ( BPAI 2010) (informative) (“Properly interpreted, the Rules do not require the Board to take up a belated argument that has not been addressed by the Examiner, absent a showing of good cause.”). On this record, Appellants have not provided such a showing of good cause.

Appellants do not present additional arguments with respect to the limitations of dependent claims 2–3, 5–7, 9–10, 12–14, 16–17, and 19–20, which are not argued separately with sufficient particularity. *See* App. Br. 13. For the reasons discussed above, we are not persuaded the Examiner erred in finding the combined teachings and suggestions of McLellan and Stewart disclose the disputed features of the claimed invention. Accordingly, we sustain the Examiner’s rejection of claims 1–3, 5–10, 12–17, and 19–20 under 35 U.S.C. § 103(a). Arguments not presented are waived. *See* 37 C.F.R. § 41.37(c)(1)(iv); *see also* 37 C.F.R. § 41.41(b)(2).

## DECISION

We affirm the Examiner’s rejection of claims 1–3, 5–10, 12–17, and 19–20 under 35 U.S.C. § 101.

We affirm the Examiner’s rejection of claims 1–3, 5–10, 12–17, and 19–20 under 35 U.S.C. § 103(a).

No time period for taking any subsequent action in connection with

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this appeal may be extended under 37 C.F.R. § 1.136(a)(1)(iv).

AFFIRMED