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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* JAGADESHWAR REDDY NOMULA

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Appeal 2018-009228  
Application 15/245,208  
Technology Center 3600

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Before DENISE M. POTHIER, JUSTIN BUSCH, and  
NORMAN H. BEAMER, *Administrative Patent Judges*.

POTHIER, *Administrative Patent Judge*.

DECISION ON APPEAL

STATEMENT OF THE CASE

Pursuant to 35 U.S.C. § 134(a), Appellant<sup>1,2</sup> appeals from the Examiner's decision to reject claims 1–29. Appeal Br. 2. We have jurisdiction under 35 U.S.C. § 6(b).

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<sup>1</sup> We use the word “Appellant” to refer to “applicant” as defined in 37 C.F.R. § 1.42(a). Appellant identifies the real party in interest as Jagadeshwar Reddy Nomula. Appeal Br. 2.

<sup>2</sup> Throughout this opinion, we refer to the Final Action (Final Act.) mailed June 16, 2017, the Appeal Brief (Appeal Br.) filed March 19, 2018, the Examiner's Answer (Ans.) mailed July 24, 2018, and the Reply Brief (Reply Br.) filed September 24, 2018.

We AFFIRM.

### CLAIMED SUBJECT MATTER

The claims are directed to “to presenting targeted content to the users based on information aggregated from one or more online social networking platforms.” Spec. ¶ 1. The Specification indicates that “there is a need for a technique to improve relevancy of the targeted content presented to users” and that “the technique shall enable aggregation of information corresponding to users across online social networking platforms.” *Id.* ¶ 7.

Claim 1 is reproduced below:

1. A method, performed by an aggregator computer system, for providing an entity of content targeting a specific user to a first computer system operating a first website, the aggregator computer system having access to a database storing, for each of a plurality of users, a respective user identifier used to identify the respective user and respective aggregated activity information of the respective user, the method comprising steps of:
  - receiving, from a computing device of a first user, by the aggregator computer system, a first set of identification information of the first user identifying the first user;
  - generating, by the aggregator computer system, a first user identifier using the received first set of identification information of the first user, and storing the generated first user identifier in the database such that the first user becomes added to the plurality of users of the database and the stored first user identifier becomes the respective user identifier used to identify the first user;
  - aggregating, by the aggregator computer system, activity information about the first user from each of a group of two or more website computer systems each operating a respective website, to form the aggregated activity information of the first user stored in the database, the stored respective aggregated activity information of the first user including two or more sets of activity information of the first user each indicating one or

more occurrences of prior activities which the first user conducted on the respective website of one respective website computer system among the group of website computer systems;

receiving, from the first computer system, by the aggregator computer system, a content request targeting the first user including a second set of identification information of the first user, and matching, by the aggregator computer system, the received second set of identification information of the first user, with the stored first user identifier of the first user;

acquiring, in response to the content request targeting the first user, by the aggregator computer system, an entity of content targeting the first user using the respective aggregated activity information of the first user stored in the database; and

sending, to the first computer system, by the aggregator computer system, the acquired entity of content targeting the first user, for the first computer system to present the acquired entity of content by incorporating the acquired entity of content into a content page of the first website displayable on a user terminal visiting the first website.

Appeal Br. 26–27 (Claims App.).

### THE INELIGIBILITY REJECTION

Claims 1–29 are rejected under 35 U.S.C. § 101. Final Act. 6–8. The Examiner finds that the claims “recite a concept of distributing advertising.” Final Act. 8. The Examiner further finds the following recitations “map[] to at least one abstract idea” (*id.* at 6 (emphasis omitted)): “providing an entity of content targeting a specific user,” “receiving . . . a first set of identification information,” “generating . . . a first user identifier,” “aggregating . . . activity information about the first user,” “receiving . . . content request targeting the first user,” “acquiring . . . an entity of content targeting the first user,” and “sending . . . the acquired entity of content

targeting the first user.” *Id.* at 6–7. The Examiner also finds the claims’ additional elements do not meaningfully transform the abstract idea into a patent eligible application (*id.* at 6), including that “they [do not] effect an improvement in any other technology or technical field” (*id.* at 8) and that the steps do “nothing more than require a generic computer to perform generic computer functions” (*id.* at 7).

Appellant argues the Examiner has not met the burden of setting forth a prima facie case of patent ineligibility. Appeal Br. 19. Appellant contends that the Examiner has not identified one abstract idea and has oversimplified the abstract idea to which claim 1 in its entirety is directed. *Id.* at 16–17. Appellant also contends its claimed invention “is an improvement over a conventional approach of only using information based on, e.g., generic actions done by a group of similar users.” *Id.* at 15. Appellant compares the instant claims to the claims in *McRO, Inc. v. Bandai Namco Games America*, F.3d (Fed. Cir. 2016). *Id.* at 18. Appellant argues that the claims are not directed to an abstract idea because acquiring content targeting a specific user using aggregated information about the user’s online activities aggregated from different systems operating websites as claim 1 recites is an improvement in the technological process that makes the information more relevant to the user. *Id.* at 18. Appellant also argues claim 1’s additional limitations “amount to *significantly more* than the alleged judicial exception.” *Id.* at 19. Citing to *DDR Holdings, LLC v. Hotels.com*, 773 F.3d 1245 (Fed. Cir. 2014), Appellant contends (1) the claimed subject matter “overcome[s] a problem specifically rising in the realm of computer networks[,]” namely “providing content (targeting a specific user),” which

the conventional art did not address, and (2) the additional elements are not merely conventional or routine use of the Internet. *Id.* at 19–21.

## LEGAL FRAMEWORK

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 Alice Corp. v. CLS Bank Int’l*, 573 U.S. 208, 216 (2014).

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)). Under that framework, we first determine what concept the claim is “directed to.” *See Alice*, 573 U.S. at 219; *see also Bilski v. Kappos*, 561 U.S. 593, 611 (2010). Concepts determined to be abstract ideas, and thus patent ineligible, include certain methods of organizing human activity, such as fundamental economic practices (*Alice*, 573 U.S. at 219–20; *Bilski*, 561 U.S. at 611); mathematical formulas (*Parker v. Flook*, 437 U.S. 584, 594–95 (1978)); and mental processes (*Gottschalk v. Benson*, 409 U.S. 63, 69 (1972)).

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 (internal quotation marks 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). “[M]erely requir[ing] generic computer implementation[] fail[s] to transform that abstract idea into a patent-eligible invention.” *Id.*

The PTO recently published revised guidance concerning 35 U.S.C. § 101. *2019 Revised Patent Subject Matter Eligibility Guidance* (“2019 Guidance”), 84 Fed. Reg. 50 (Jan. 7, 2019). Under this 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 interactions such as a fundamental economic practice, or mental processes) (“Step 2A, Prong One”); and
- (2) additional elements that integrate the judicial exception into a practical application (*see* MPEP § 2106.05(a)–(c), (e)–(h)) (“Step 2A, Prong Two”).

*See* 2019 Guidance, 84 Fed. Reg. 50–52, 54–55.

If a claim (1) recites a judicial exception and (2) does not integrate that exception into a practical application, we further consider 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, conventional activities previously known to the industry, specified at a high level of generality, to the judicial exception (“Step 2B”).

*See* 2019 Guidance, 84 Fed. Reg. 50, 56.

## ANALYSIS

Based on the record, we find no error. Appellant argues the claims as a group. Appeal Br. 13–21. We select claim 1 as representative, *see* 37 C.F.R. § 41.37(c)(1)(iv), and focus on this claim for purposes of discussion.

### *The Judicial Exception — Revised Step 2A, Prong 1*

Among other descriptions, the Examiner finds claim 1 recites “the concept of distributing advertising” (Final Act. 8) and “correlating online user purchase activity,” which “amount[] to a certain method of organizing human activity” (Ans. 3). Thus, the Examiner has met his burden to identify an abstract idea contrary to Appellant’s argument. *See* Appeal Br. 18.

Claim 1 is reproduced below, with the claim limitations that recite the abstract idea in italics:

1. *A method, performed by an aggregator computer system, for providing an entity of content targeting a specific user to a first computer system operating a first website, the aggregator computer system having access to a database storing, for each of a plurality of users, a respective user identifier used to identify the respective user and respective aggregated activity information of the respective user, the method comprising steps of:*

*receiving, from a computing device of a first user, by the aggregator computer system, a first set of identification information of the first user identifying the first user;*

*generating, by the aggregator computer system, a first user identifier using the received first set of identification information of the first user, and storing the generated first user identifier in the database such that the first user becomes added to the plurality of users of the database and the stored first user identifier becomes the respective user identifier used to identify the first user;*

*aggregating, by the aggregator computer system, activity information about the first user from each of a group of two or more website computer systems each operating a respective website, to form the aggregated activity information of the first user stored in the database, the stored respective aggregated activity information of the first user including two or more sets of activity information of the first user each indicating one or more occurrences of prior activities which the first user conducted on the respective website of one respective website computer system among the group of website computer systems;*

*receiving, from the first computer system, by the aggregator computer system, a content request targeting the first user including a second set of identification information of the first user, and matching, by the aggregator computer system, the received second set of identification information of the first user, with the stored first user identifier of the first user;*

*acquiring, in response to the content request targeting the first user, by the aggregator computer system, an entity of content targeting the first user using the respective aggregated activity information of the first user stored in the database; and*

*sending, to the first computer system, by the aggregator computer system, the acquired entity of content targeting the first user, for the first computer system to present the acquired entity of content by incorporating the acquired entity of content into a content page of the first website displayable on a user terminal visiting the first website.*

Appeal Br. 26–27 (Claims App.); *see* Final Act. 6–7 (identifying the same steps as “at least one abstract idea category”) (emphasis omitted).

Providing targeted content (e.g., “an entity of content” or a gift recommendation targeting a specific giftee user) (*see* Appeal Br. 15)) to a specific user by collecting user activities, including online activity information about the user (e.g., the recited “activity information about the first user” from various websites), is a commercial interaction (e.g., advertising, marketing, or sales activities). *See* 2019 Guidance, 84 Fed. Reg. 50, 52 (explaining that the grouping of certain methods of organizing human activity includes “commercial or legal interactions”); *see Intellectual Ventures I LLC v. Capital One Bank (USA)*, 792 F.3d 1363, 1369 (Fed. Cir. 2015) (holding that “tailoring content based on the viewer’s location” (i.e., a function of the user’s personal characteristics) is the type of information tailoring that is a fundamental practice long prevalent in our system and is an abstract idea); *see also Affinity Labs of Tex., LLC v. Amazon.com Inc.*, 838 F.3d 1266, 1271 (Fed. Cir. 2016) (concluding “[l]ike the basic concept of tailoring content to a user, as in *Intellectual Ventures I*, the basic concept of customizing a user interface is an abstract idea”); *cf. Morsa v. Facebook, Inc.*, 77 F. Supp. 3d 1007, 1013 (C.D. Cal. 2014), *aff’d*, 622 F. App’x 915 (Fed. Cir. 2015) (quoting *Tuxis Techs., LLC v. Amazon.com, Inc.*, No. CV 13-1771-RGA, 2014 WL 4382446, at \*5 (D. Del. Sept. 3, 2014)) (“[T]argeted advertising is [a well-known] concept, insofar as matching consumers with a given product or service ‘has been practiced as long as markets have been in operation.’”); *Intellectual Ventures I LLC v. J. Crew Grp., Inc.*, No. 6:16-CV-196-JRG, 2016 WL 4591794, at \*5 (E.D. Tex. Aug. 24, 2016), *aff’d sub nom. Intellectual Ventures I LLC v. FTD Cos.*, 703 F. App’x 991 (Fed. Cir. 2017) (affirming district court ruling that claims directed to recommending products to customers based on purchase history

recited an abstract idea). Because claim 1 covers commercial interactions, claim 1 recites subject matter that falls within the group of certain methods of organizing human activity set forth in the 2019 Guidance.

Our position is also consistent with the Specification’s description of the claimed subject matter, which states its invention relates “to the field of presenting targeted content to users of website” and “more particularly, . . . to presenting targeted content to the users based on information aggregated from one or more online social networking platforms.” Spec. ¶ 2. Similarly, Appellant states “the claimed subject matter is provided to increase the relevancy of content specifically targeting a specific user (as provided by an online system) by acquiring a content using aggregated information about online activities of that specific user” (Appeal Br. 15) or “providing online content targeting a specific user” (*id.* at 18).

Alternatively, the above italicized steps can be viewed as mental steps because the noted steps involve collecting, identifying, and analyzing data—all of which can be accomplished by the human mind or with the assistance of pen and paper. *See* 84 Fed. Reg. at 52; *see also Elec. Power Grp., LLC v. Alstom S.A.*, 830 F.3d 1350, 1353–54 (Fed. Cir. 2016) (explaining that “analyzing information by steps people go through in their minds . . . without more” is a mental process within the abstract-idea category); *see also Smart Sys. Innovations, LLC v. Chicago Transit Auth.*, 873 F.3d 1364, 1372 (Fed. Cir. 2017) (concluding “the collection, storage, and recognition of data” was abstract); *see also Cybersource Corp. v. Retail Decisions, Inc.*, 654 F.3d 1366, 1372-73 (Fed. Cir. 2011) (indicating its claimed “method steps [that] can be performed in the human mind, or by a human using pen and paper” included “data-gathering steps” did not confer patent eligibility).

Although we describe the abstract idea differently than the Examiner, the Examiner’s characterization is not erroneous. “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). The level of abstraction the Office uses to describe an abstract idea need not “impact the patentability analysis.” *Id.* at 1241. The same is true here. That is, regardless of the level of generality used to describe the abstract idea recited, the claims recite an abstract idea. *Cf. Accenture Glob. Servs., GmbH v. Guidewire Software, Inc.*, 728 F.3d 1336, 134445 (Fed. Cir. 2013) (“Although not as broad as the district court’s abstract idea of organizing data, it is nonetheless an abstract concept.”). We thus disagree that the Examiner has over-simplified the abstract idea without accounting for the specific requirements of the claim as Appellant asserts. *See* Appeal Br. 17.

Appellant also argues that the Examiner failed to identify one abstract idea for the entire claim. Appeal Br. 16–17; Reply Br. 4. We are not persuaded. “Adding one abstract idea (math) to another abstract idea (encoding and decoding) does not render the claim non-abstract.” *See RecogniCorp, LLC v. Nintendo Co.*, 855 F.3d 1322, 1327 (Fed. Cir. 2017). Also, to the extent Appellant asserts the Examiner fails to identify *any* abstract idea, we disagree for the above-stated reasons.

For the above reasons, we are not persuaded that the Examiner erred in determining that the claims recite a judicial exception.

*Integration into a Practical Application — Revised Step 2A, Prong 2*

Because the claims recite a judicial exception, we next determine whether the claims as a whole integrate the abstract idea into a practical

application. 2019 Guidance, 84 Fed. Reg. at 54. To determine whether the judicial exception is integrated into a practical application, we identify whether there are “any additional elements recited in the claim beyond the judicial exception(s)” and evaluate those elements alone and collectively to determine whether they integrate the judicial exception into a recognized practical application. 2019 Guidance, 84 Fed. Reg. at 54-55 (emphasis added); *see also* Manual of Patent Examining Procedure (“MPEP”) § 2106.05(a)-(c), (e)-(h) (9th ed., Rev. 08.2017, Jan. 2018).

Here, we find the additional limitations do not integrate the judicial exception into a practical application. More particularly, the claims do not recite (i) an improvement to the functionality of a computer or other technology or technical field (*see* MPEP § 2106.05(a)); (ii) the judicial exception is applied with or used by a “particular machine” (*see* MPEP § 2106.05(b)); (iii) a particular transformation of an article to a different thing or state (*see* MPEP § 2106.05(c)); or (iv) any other meaningful limitation (*see* MPEP § 2106.05(e)). *See also* 2019 Guidance, 84 Fed. Reg. at 55; *see also* Final Act. 7–8.

For example, claim 1’s additional limitations include “an aggregator computer system,” “a computing device of a first user,” “a database,” “a group of two or more website computer systems[,] each operating a respective website,” “a first computer system operating a first website,” and “a user terminal.” Appeal Br. 26–27 (Claims App.). Many of these additional limitations simply recite computer systems/devices that perform the steps of: (1) “receiving” or “sending” information (e.g., “a computing device of the first user,” the “aggregator computer system,” and “first computer system”), (2) “generating” or “aggregating” information (e.g., the

“aggregator computer system”), and (3) “acquiring” information (e.g., the “aggregator computer system”). Appeal Br. 26–27 (Claims App.). The functions that the “aggregator computer system,” “computing device of the first user,” and “first computer system” perform in claim 1 do not integrate the judicial exception into a practical application. Instead, the claims merely use computer-based devices in their normal, expected manner of sending, receiving, and generating information. *See DDR Holdings, LLC v. Hotels.com, L.P.*, 773 F.3d 1245, 1258–59 (Fed. Cir. 2014).

Similarly, the claims merely use the recited “database” in its normal, expected manner of “storing” information about “a plurality the users,” including the “first user.” Appeal Br. 26–27 (Claims App.). Also, the recited “website computer system” and “first computer system” function in their normal, expected manner of operating a website (i.e., “a respective website” or “a first website”) as explicitly recited. *Id.* Thus, these additional features in claim 1 are merely tools to perform their expected functions rather than a technological improvement in either these elements (e.g., the database, computer systems, and websites) or their operation. The noted additional elements merely recite or apply generic computer elements to an abstract idea, which cannot transform a patent-ineligible abstract idea into a patent-eligible invention. *See Alice*, 573 U.S. at 223.

Additionally, as the court in *Enfish* explained, “the first step in the *Alice* inquiry . . . asks whether the focus of the claims is on the specific asserted improvement in computer capabilities . . . or, instead, on a process that qualifies as an ‘abstract idea’ for which computers are invoked merely as a tool.” *Enfish, LLC v. Microsoft Corp.*, 822 F.3d 1327, 1335–36 (Fed. Cir. 2016). As discussed above, the focus of the pending claims is on

providing targeted content to a specific user by collecting activity information about the user, which qualifies as a judicial exception, and the recited computing elements are invoked merely as a tool to implement the claims' steps. *See Enfish*, 822 F.3d at 1335-36.

As for the recited “user terminal,” this additional element is recited in the intended use limitation “for the first computer system to present the acquired entity of content by incorporating the acquired entity of content into a content page of the first website displayable on a user terminal visiting the first website.” Appeal Br. 27 (Claims App.). Regardless, the recited “user terminal” also behaves in its normal and expected manner to display information to a user.

To the extent any or all of the “receiving . . . a first set of identification information,” “generating,” “aggregating,” “receiving . . . a content request targeting the first user,” and “sending” steps are not considered part of the abstract idea, these are merely insignificant extra-solution activity to gather data so that the information can be analyzed to determine which content to target and send to the first user. 2019 Guidance, 84 Fed. Reg. at 55 n.31 (explaining that extra-solution activities, such as gathering data and outputting the results of an abstract idea, are insufficient to integrate the abstract idea into a practical application). Such extra-solution activities do not confer patent eligibility. *See* MPEP § 2106.05(g); *see also Parker v. Flook*, 437 U.S. 584, 590 (1978) (adjusting an alarm limit based on output of the abstract idea was insufficient to render the claimed method patent eligible); *see also CyberSource Corp.*, 654 F.3d at 1375 (explaining that data gathering is insignificant extra-solution activity).

Appellant also states “the claimed subject matter is provided to improve the conventional art of providing online content targeting a specific user” by aggregating information about online activities related to the specific user and making the acquired content more relevant. Appeal Br. 18; *see id.* at 15. According to the Specification, known approaches exist to present targeted content to a user (e.g., recommend books to its users) on a website (e.g., [www.goodreads.com](http://www.goodreads.com)) by gathering information about the user “from only one social networking platform” (e.g., Facebook), but these approaches do not aggregate a user’s interactions “across social networks” (e.g., LinkedIn, Facebook, and Foursquare) so as to “leverage this information to enhance the relevance of targeted content presented to the user.” Spec. ¶ 6; *see id.* ¶¶ 7, 26. Even so, Appellant’s noted improvement (e.g., the recited “aggregating” step as well as the “acquiring . . . an entity of content targeting the first user using the respective aggregated activity information of the first user”) are elements of the steps identified above as the abstract idea. But, “a claim for a *new* abstract idea is still an abstract idea.” *Synopsys, Inc. v. Mentor Graphics Corp.*, 839 F.3d 1138, 1151 (Fed. Cir. 2016).

Even considering the additional elements in combination with the abstract idea, using generic computer-based devices to perform these steps limits the abstract idea at most to a particular technological environment (e.g., online targeting of content based on information about a user’s activities on two or more websites), which is insufficient to integrate the abstract idea into a practical application. *See Alice*, 573 U.S. at 223; *see* 2019 Guidance, 84 Fed. Reg. at 55. We thus disagree with Appellant that the claimed subject matter overcomes any problem specifically arising

in the realm of computer networks. *See* Appeal Br. 19–21. Rather, the claimed subject matter relates to the above-identified abstract idea performed by generic computer systems as previously explained. *See* Final Act. 8 (noting “[t]he remaining elements comprise only a generic computer”).

Also, Appellant contends the instant claims are analogous to *McRO*. Appeal Br. 18. The claims in *McRO* recited a “specific . . . improvement in computer animation” using “unconventional rules” that related “sub-sequences of phonemes, timings, and morph weight sets” to automatically animate lip synchronization and facial expressions for three-dimensional characters that only human animators could previously produce. *McRO*, 837 F.3d at 1302–03, 1307–08, 1313–15. In *McRO*, “the incorporation of the claimed rules” improved an existing technological process. *McRO*, 837 F.3d at 1314. In contrast, Appellant’s claims that acquire content targeting a specific user using aggregated information do not improve an existing technological process or computer technology. Contrary to Appellant’s assertions, the claims instead use computers and computer-based devices to perform the claimed commercial interaction or mental processes as previously explained. *See Enfish*, 822 F.3d at 1335–36 (distinguishing between claims that focus on improving computer capabilities and those that invoke a computer as a tool).

Accordingly, we are not persuaded that the Examiner erred in determining that the claims are directed to at least one abstract idea.

*The Inventive Concept —Step 2B*

Because we determine the claims are directed to an abstract idea or combination of abstract ideas, we evaluate whether the claims include an

inventive concept. *See* 2019 Guidance, 84 Fed. Reg. at 56. Specifically, we determine whether the claims (1) add a specific limitation, or combination of limitations, that is not well-understood, routine, conventional activity in the field, or (2) simply append well-understood, routine, conventional activities at a high level of generality. 2019 Guidance, 84 Fed. Reg. at 56.

Regarding the inventive concept, the Examiner finds, among other things, “[t]he remaining elements comprise only a generic computer performing generic computer functions that do not impose meaningful limits on the claimed invention” (Final Act. 8) and “the individual limitations claimed are some of the most basic functions of a computer. All of these computer functions are well-understood, routine, conventional activities previously known to the industry” (*id.* at 7). *See id.* at 4–5 (discussing “using some unspecified, generic computer” to perform steps of the claims).

Appellant argues the Examiner does not analyze the claims under “Step 2B”<sup>3</sup> other than “generically concluding that [the] steps included in the claimed subject matter are ALL conventional.” Appeal Br. 19. We are not persuaded. Although the Examiner’s statements related to what activities in claim 1 are well-understood, routine, and conventional may seemingly indicate that all its steps are “conventional” (Final Act. 6; *see id.* at 6–8), we understand the Examiner’s position to be that the steps quoted on pages 6–7 of the Final Office Action to be the “mapping to at least one abstract idea.” *Id.* at 6 (emphasis omitted); *see id.* at 7 (concluding that the quoted steps are directed to “[a]n idea itself”). In the next paragraph the Examiner begins to discuss “a computer” and its functions (*id.* at 7), which

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<sup>3</sup> “Step 2B” is the same as the “‘Inventive Concept’ test in evaluating ‘significantly more’ with respect to the claim.” Appeal Br. 13.

are noticeably omitted by the Examiner when quoting from claim 1 and mapping the abstract idea (*id.* at 6–7). Thus, we understand the Examiner’s position to be the recited computer-based elements (e.g., “aggregator computer system,” “first computer system,” “computing device,” “website computer systems,” “database,” and “user terminal”) and the functions they perform are well-understood, routine, and conventional (*see id.* at 6–7) as well as these additional elements are “only . . . generic computer[s] performing generic computer functions that do not impose meaningful limits on the claimed invention” (*id.* at 8). *See also* Ans. 4 (citing Spec. ¶ 20).

The Specification supports the Examiner’s position. As shown in Figure 1, many of the additional recited elements, including “user terminal”/“computing device of a first user” (e.g., 110), “group of two or more website computer systems[,] each operating a respective website” (e.g., first social networking platform 112 and second social networking platform 114), and “aggregator computer system” (e.g., data aggregation module 104), and “database” (e.g., 106) are shown as black boxes. *See* Spec., Fig. 1. Also, the Specification discloses and shows generically data aggregation module 104 and database 106 as part of system 100. *See* Spec. ¶ 21, Fig. 1. Similarly, social networking platform 112 and second social networking platform 114 (e.g., the recited “group of two or more website computer systems[,] each operating a respective website” and “first computer system operating a first website”) are described generally and as commercially available products (e.g., LinkedIn and Foursquare). *See id.* ¶¶ 6, 22, 26, Fig. 1. Also, to the extent the recited “first computer system operating a first website” is not a social networking platform shown in Figure 1 but rather is intended to claim targeted content selection module 108 (or another

module),<sup>4</sup> the Specification only discusses this module generally and shows it as a black box. *See id.* ¶¶ 21, 38, Fig. 1. Lastly, the Specification describes user terminal 110 (e.g., a desktop computer or a laptop) and a website (e.g., an ecommerce website, blog, or corporate website) as commercially available products (e.g., YouTube). *See id.* ¶ 20, Fig. 1.

Appellant argues claim 1’s additional limitations “amount to *significantly more* than the alleged judicial exception.” Appeal Br. 19. Citing to *DDR Holdings*, Appellant contends the claimed subject matter “overcome[s] a problem specifically rising in the realm of computer networks[,]” namely “providing content (targeting a specific user) that is not very relevant to the specific user.” *Id.* More specifically, Appellant argues the conventional art does not address aggregating user online activity information from multiple websites and that the additional elements are not merely conventional or routine use of the Internet. *Id.* at 19–21.

We are not persuaded. The additionally recited elements in claim 1 do not recite a computer network, at best reciting “website computer systems” that operate websites. Thus, unlike *DDR Holdings*, we disagree that the claims are “in the realm of computer networks,” such that the claimed solution is necessarily rooted in computer technology or overcomes a problem arising in computer networks. Rather, Appellant’s noted improvement (e.g., the recited “aggregating” step as well as the “acquiring, by the aggregator computer system, an entity of content targeting the first user using the respective aggregated activity information of the first user”

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<sup>4</sup> Notably, Appellant failed to refer to the Specification to explain the claimed subject matter in its Appeal Brief as required by 37 C.F.R. § 41.37(c)(iii). *See* Appeal Br. 2–12.

and “sending to the first computer, by the aggregator computer system, the acquired entity of content targeting the first user for the first computer system to present the acquired entity of content” (*see* Appeal Br. 20–21)) are mainly components identified above as the abstract idea or are steps of an improved abstract idea. *See Synopsys, Inc.*, 839 F.3d at 1151 (stating “a claim for a *new* abstract idea is still an abstract idea.”). The argument thus that the “aggregating” step or other recited steps are not “routine or conventional use of the Internet” (Appeal Br. 21) does not address the additional elements of the claim, alone or in combination, to determine whether they amount to significantly more than the alleged judicial exception. *See also* 2019 Guidance, 84 Fed. Reg. 50, 56 (stating “examiners should then evaluate the *additional elements* individually and in combination under Step 2B to determine whether they provide an inventive concept (*i.e.*, *whether* the additional elements amount to significantly more than the exception itself.”) (first emphasis added).

Additionally, according to the Specification, known approaches exist to present targeted content to a user (e.g., recommend books to its users) on a website (e.g., [www.goodreads.com](http://www.goodreads.com)) by gathering information about the user from a social networking platform (e.g., Facebook, LinkedIn, Facebook, and Foursquare). Spec. ¶ 6. These approaches include a user “providing his online social networking authentication credentials,” “using information gathered from an online social networking platform, which the user may be using,” “recommend[ing] books to users based on the information corresponding to the user that is gathered from an online social networking platform ([www.facebook.com](http://www.facebook.com)),” and “provid[ing] access to information that may be used to give recommendations.” *Id.* Thus, even presuming, without

agreeing, that some of the steps in claim 1 are not considered part of the abstract idea (e.g., “receiving, from a computing device of a first user, by the . . . computer system, a first set of identification information of the first user identifying the first user,” “generating, by the . . . computer system, a first user identifier using the received first set of identification information of the first user,” “receiving from the first computer system [operating a first website] by the . . . computer system, a content request targeting the first user,” “acquiring, in response to the content request targeting the first user, by the . . . computer system, an entity of content targeting the first user,” and “sending, to the first computer system, by the . . . computer system, the acquired entity of content targeting the first user, for the first computer system to present the . . . content by incorporating the . . . content into a content page of the first website displayable on a user terminal visiting the first website”), the Specification discusses how these steps are known, routine, and conventional.

For the foregoing reasons, Appellant has not persuaded us of error in the rejection of independent claims 1 and 23 and the dependent claims, which are not argued separately.

#### THE OBVIOUSNESS REJECTION OVER RAMER

Claims 1–29 are rejected under 35 U.S.C. § 103(a) based on Ramer (US 2008/0215428 A1, published Sept. 4, 2008). Final Act. 9–23.

Among other arguments, Appellant argues Ramer does not teach certain elements of the claims, including the claimed “first computer system operating a first website” and the claimed “group of two or more website computer systems[,] each operating a respective website” in claim 1. *See* Appeal Br. 23 (referring to these elements as the “two ESSENTIAL

ELEMENTS”). Noting cited paragraphs 60, 64, 94, and 460, Appellant contends that “[t]he Examiner, in citing those paragraphs of Ramer, only generally alleges that somehow these paragraphs of Ramer disclose or suggest the claimed steps but without even bothering to identify, e.g., which element of Ramer discloses the” above-identified elements. *Id.* at 24; *see also* Reply Br. 6–7.

### ISSUE

Under § 103, has the Examiner erred in rejecting claim 1 by finding that Ramer would have taught or suggested its recited (1) “first computer operating a first website” limitations and (2) “group of two or more website computer systems each operating a respective website” limitation?

### ANALYSIS

Based on the record before us, we find error.

*“[F]irst computer operating a first website” limitations*

For the recited “first computer system operating a first website” recitation found in the preamble, the Examiner relies on various passages in Ramer. *See* Final Act. 9–10 (citing Ramer ¶¶ 60, 64, 94, code (57)). But, for the reasons discussed below, the Examiner has not explained or identified adequately what components discussed in these paragraphs are being mapped to the recited “first computer system.”

Turning to the Abstract, Ramer discloses the invention relates to associating an interactive element with sponsored content, presenting the content to a mobile communication facility based on the relevancy of mobile subscriber characteristic, and allowing a user of the mobile communication

facility to engage with the interactive element. Ramer, code (57). The Examiner has not explained how this passage teaches “providing an entity of content targeting a specific user *to a computer system operating a first website*” as recited. Appeal Br. 26 (Claims App.) (emphasis added). We are unsure whether the Examiner intends to map the discussed “content to a mobile communication facility” to the recited “first computer system operating a first website.” See Final Act. 9–10. In any event, Ramer discloses mobile communication facility 102, shown in Figure 1, as a device, such as a cell phone or personal digital assistant (Ramer ¶ 46, Fig. 1), which may launch, but not necessarily “operat[e] a first website” (*see id.* ¶ 45).

Moreover, claim 1 recites “a user terminal” separate from “the first computer system” that is used “to present the acquired entity of content [targeting the first user] by incorporating the acquired entity of content into a content page of the first website displayable on a user terminal visiting the first website.” Appeal Br. 27 (Claims App.). “A claim construction that gives meaning to all the terms of the claim is preferred over one that does not do so.” *Merck & Co. v. Teva Pharm. USA, Inc.*, 395 F.3d 1364, 1372 (Fed. Cir. 2005). Following this principle, the recited “first computer system” in claim 1 is separate and differs from the recited “user terminal” that displays the first website’s content as recited. Appeal Br. 27 (Claims App.). But, the rejection does not explain what structure in Ramer is being mapped to the separately recited “user terminal” in claim 1. See Final Act. 11.

Although not identifying any particular recitation found in the claims, the Examiner further states that “a recitation directed to the manner in which a claimed apparatus is intended to be used does not distinguish the claimed

apparatus from the prior art, if the prior art has the capability to so perform.”  
Ans. 4 (citing MPEP § 2114(II); *Ex parte Masham*, 2 USPQ2d 1647 (BPAI 1987)). Presuming the Examiner is referring to the recited “first computer system” in claim 1’s preamble, the content-receiving step positively recites “receiving, from the first computer system . . . a content request targeting the first user,” and “sending” step positively recites “sending, to the first computer system, . . . the acquired entity of content targeting the first user.”  
Appeal Br. 26–27 (Claims App.). As claimed, the “first computer system” recitations are thus not intended use limitations as the Examiner’s comments (*see* Ans. 4) imply.

Ramer also discusses wireless search platform 100 that contains mobile subscriber characteristics 112 of mobile communication facility 102 collected by wireless provider 108. Ramer ¶ 60, Fig. 1. The Examiner does not clarify, which, if any of these elements, are being mapped to the recited “first computer system.” *See* Final Act. 9–10. Similarly, Ramer discusses usage history 190 stored in a database and associated with mobile communication facility 102 as well other components. Ramer ¶ 64, Fig. 1. But once again, the Examiner does not clarify, which, if any of these discussed elements, are being mapped to the recited “first computer system.” *See* Final Act. 9–10. Lastly, Ramer discusses a user providing an input through a user interface of mobile communication facility 102 and providing an action command (Ramer ¶ 94), but this paragraph does not clearly address what the Examiner views as the recited “first computer system operating a first website” separate from the “user terminal” as claim 1 recites.

As for remaining cited portions of Ramer that include recitations to “the first computer system,” we fail to understand how the Examiner has mapped the recited “computer system” to these discussions. *See* Final Act. 11 (citing Ramer ¶¶ 460, 858, 892, 993). Rather, as understood, these citations are meant to teach the “receiving . . . a content request targeting the first user” and “sending . . . the acquired entity of content targeting the first user” limitations in claim 1. *See id.* In any event, the Examiner has not explained in any detail how these cited passages may address what may be missing from paragraphs 60, 64, and 94 in Ramer. *See* Final Act. 9–11; *see* Ans. 4.

*“[G]roup of two or more website computer systems each operating a respective website” limitation*

For the recited “group of two or more website computer systems[,] each operating a respective website” recitation, the Examiner relies on various passages in Ramer. *See* Final Act. 10 (citing Ramer ¶¶ 60, 64, 94, 460, code (57)). But, for the reasons discussed below, the Examiner has not explained or identified adequately what components discussed in these paragraphs are being mapped to the recited “group of two or more website computer systems” separate from the “first computer system operating a first website” in claim 1.

Above, we address paragraphs 60, 64, and 94 of Ramer as well as its Abstract. There, we concluded that the Examiner has not explained what passage in Ramer teaches or suggests “the first computer system”—let alone “a group of two or more website computer systems” as claim 1 separately recites. As for paragraph 460, Ramer discusses XML feeds that return specific results based on a query (Ramer ¶ 460); but, the Examiner has not

explained how this discussion teaches or suggests “two or more website computer systems” as recited. Also, even presuming, without agreeing that the cited passages in *Ramer* somehow teach or suggest “a first computer system operating a first website” as recited, the Examiner has not sufficiently explained how these same passages additionally teach or suggest “two or more website computer systems[,] each operating a respective website” as further recited. To extent the Examiner construes the “first computer system” as one of the recited “group of two or more website computer systems,” the Examiner has not articulated this position in the record. *See* Final Act. 9–11.

In the Examiner’s Answer, the Examiner “points to the previously cited sections of *Ramer*” to explain what is being mapped to the recited “group of two or more website computer systems” as claimed. Ans. 4. This explanation does not assist us. The Examiner additionally states “the previously cited sections of *Ramer* . . . include mentions of the third party servers (advertising servers).” Upon review, only paragraph 64 discusses third party server 134. *See* *Ramer* ¶ 64, Fig. 1. Although *Ramer*’s Figure 1 shows two servers 134 (*see id.*, Fig. 1) and *Ramer* discusses the servers can be associated with usage history 190 (*see id.* ¶ 64), the Examiner has not articulated for the record how these servers are the “group of two or more website computer systems” from which an aggregator computer system “aggregat[es] . . . activity about the first user” as claim 1 further recites. *See* Final Act. 10; *see also* Ans. 4.

The Examiner even further states there are “references throughout *Ramer* describing different websites from which the *Ramer* method pulls

data for use in targeted advertising campaigns.” Ans. 4. Yet, the Examiner provides no citations or support for this proposition. *See id.*

Based on the record, we conclude the Examiner has not sufficiently informed Appellant of the reasons for the rejection. *See* 35 U.S.C. § 132; *see also In re Jung*, 637 F.3d 1356, 1362 (Fed. Cir. 2011). We therefore are constrained to conclude the presented rejection does not establish a prima facie case of obviousness under 35 U.S.C. § 103.

For the foregoing reasons, Appellant has persuaded us of error in the rejection of (1) independent claim 1, (2) independent claim 23, which recites similar limitations<sup>5</sup> and (3) dependent claims 2–22 and 24–29 for similar reasons.

#### DECISION SUMMARY

In summary:

<b>Claims Rejected</b>	<b>35 U.S.C. §</b>	<b>Reference(s)/Basis</b>	<b>Affirmed</b>	<b>Reversed</b>
1–29	101	Eligibility	1–29	
1–29	103	Ramer		1–29
<b>Overall Outcome</b>			1–29	

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<sup>5</sup> Claim 23 recites “the first computer system” in the claim’s body. The “group of two or more website systems” is found in claim 23’s preamble. Appeal Br. 35–36 (Claims App.). Claim 23 further recites in its claim’s body “using the respective aggregated activity information” (*id.* at 36 (Claims App.)), which is “aggregated from a group of two or more website computer systems” (*id.* at 35 (Claims App.)).

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TIME PERIOD FOR 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). *See* 37 C.F.R. § 1.136(a)(1)(iv).

AFFIRMED