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BEFORE THE PATENT TRIAL AND APPEAL BOARD

Ex parte VENKATA S.J.R. BHAMIDIPATI,
HUINING FENG, BAOSHI YAN, YINGFENG OH, and
MICHAEL GRISHAVER

Appeal 2017-009173
Application 14/320,406¹
Technology Center 3600

Before LARRY J. HUME, BETH Z. SHAW, and JASON M. REPKO,
Administrative Patent Judges.

HUME, *Administrative Patent Judge.*

DECISION ON APPEAL

This is a decision on appeal under 35 U.S.C. § 134(a) of the Final Rejection of claims 1–17, which are all claims pending in the application. We have jurisdiction under 35 U.S.C. § 6(b).

We AFFIRM.

¹ According to Appellants, the real party in interest is LinkedIn Corp. App. Br. 2.

STATEMENT OF THE CASE²

The Invention

Appellants' disclosed embodiments and claimed invention relate to methods, systems and computer program products that facilitate the making of recommendations to members of a social networking application or service regarding content campaigns generally, and sponsored content campaigns in particular, where the recommendations are directed to enabling members to achieve one of several desired objectives with a content campaign.

Spec. ¶ 2.

Exemplary Claims

Claims 1 and 3 reproduced below, are representative of the subject matter on appeal (*emphasis* and some formatting added to contested prior-art limitations):

1. A method comprising:

receiving information identifying a content posting to be published to a content feed as a sponsored content posting on behalf of a first entity;

receiving information indicating a desired objective for the content posting;

receiving information identifying member profile attributes defining those members to be included in an original target audience to whom the content posting is to be presented;

² Our decision relies upon Appellants' Second Corrected Appeal Brief ("Br.," filed Nov. 28, 2016); Examiner's Answer ("Ans.," mailed Feb. 27, 2017); Final Office Action ("Final Act.," mailed May 13, 2015); and the original Specification ("Spec.," filed June 30, 2014). Appellants did not file a Reply Brief in response to the factual findings and legal conclusions in the Examiner's Answer.

publishing the content posting via a content publishing platform so that the content posting can be viewed in personalized content feeds of members of the original target audience;

subsequent to the content posting be viewed by a threshold number of members, identifying commonly possessed member profile attributes of those members of the target audience who, having viewed the content posting, interacted with the content posting in a manner consistent with the desired objective; and

automatically updating the original target audience with a revised target audience by excluding some members of the social networking service who do not possess the commonly occurring member profile attributes.

3. The method of claim 1, wherein receiving information indicating a desired objective for the content posting comprises:

causing a plurality of user-selectable desired objectives for the content posting to be presented; and

receiving information indicating a selection of one of the plurality of desired objectives for the content posting, the plurality of desired objectives selected from the group consisting of:

i) maximizing the number of members who "like" the content posting,

ii) maximizing the number of members whom-share the content posting,

iii) maximizing the number of members who comment on the content posting,

iv) maximizing the number of members who elect to follow the entity on whose behalf the content posting has been published, and

v) maximizing the number of members who select a link to a third-party hosted web page.

Prior Art

The Examiner relies upon the following prior art as evidence in rejecting the claims on appeal:

Manoogian, III, et al. US 2011/0288937 A1 Nov. 24, 2011
("Manoogian")

Rejections on Appeal

R1. Claims 1–17 stand rejected under 35 U.S.C. § 101 as being directed to patent-ineligible subject matter. Final Act. 2.

R2. Claims 1–17 stand rejected under 35 U.S.C. § 102(a)(1) as being anticipated by Manoogian. Final Act. 3.

CLAIM GROUPING

Based on Appellants' arguments (Br. 8–29) and our discretion under 37 C.F.R. § 41.37(c)(1)(iv), we decide the appeal of patent-ineligible subject matter Rejection R1 of claims 1–17 on the basis of representative claim 1; and we also decide the appeal of anticipation Rejection R2 of claims 1, 2, 4–10, and 12–17 on the basis of representative claim 1. We decide the appeal of separately argued anticipation Rejection R2 of claims 3 and 11 on the basis of representative claim 3.³

³ "Notwithstanding any other provision of this paragraph, the failure of appellant to separately argue claims which appellant has grouped together shall constitute a waiver of any argument that the Board must consider the patentability of any grouped claim separately." 37 C.F.R. § 41.37(c)(1)(iv). In addition, when Appellants do not separately argue the patentability of dependent claims, the claims stand or fall with the claims from which they depend. *In re King*, 801 F.2d 1324, 1325 (Fed. Cir. 1986).

ISSUES AND ANALYSIS

In reaching this decision, we consider all evidence presented and all arguments actually made by Appellants. To the extent Appellants have not advanced separate, substantive arguments for particular claims, or other issues, such arguments are waived. 37 C.F.R. § 41.37(c)(1)(iv). Based upon our *de novo* review of the record in light of recent Director Guidance with respect to patent-eligible subject matter rejections under 35 U.S.C. § 101, we reverse Rejection R1 of claims 1–17 for the specific reasons discussed below.

However, we disagree with Appellants' arguments with respect to anticipation Rejection R2 of claims 1–17 and, unless otherwise noted, we incorporate by reference herein and adopt as our own: (1) the findings and reasons set forth by the Examiner in the action from which this appeal is taken, and (2) the reasons and rebuttals set forth in the Examiner's Answer in response to Appellants' arguments.

1. § 101 Rejection R1 of Claims 1–17

Issue 1

Appellants argue (Br. 11–29) the Examiner's rejection of claim 1 under 35 U.S.C. § 101 as being directed to patent-ineligible subject matter is in error. These contentions present us with the following issue:

Under the USPTO's Revised Guidance, informed by our governing case law concerning 35 U.S.C. § 101, did the Examiner err in concluding claim 1 is directed to a judicial exception, i.e., an abstract idea, without significantly more, and thus is patent-ineligible under § 101?

PRINCIPLES OF LAW

A. 35 U.S.C. § 101

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

An invention is patent-eligible if it claims a “new and useful process, machine, manufacture, or composition of matter.” 35 U.S.C. § 101.⁴ 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. *E.g., Alice Corp. Pty. 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)). 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.”).

⁴ This threshold analysis of whether a claim is directed to one of the four statutory categories of invention, *i.e.*, a process, machine, manufacture, or composition of matter, is referred to as “*Step 1*” in the patent-eligibility inquiry under § 101.

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)). 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. 252, 267–68 (1853))); and manufacturing flour (*Benson*, 409 U.S. at 69 (citing *Cochrane v. Deener*, 94 U.S. 780, 785 (1876))).

In *Diehr*, the claim at issue recited a mathematical formula, but the Supreme Court held “[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.”). Having said that, the Supreme Court also indicated that a claim “seeking patent protection for that formula in the abstract . . . is not accorded the protection of our patent laws, . . . and this principle cannot be circumvented by attempting to limit the use of the formula to a particular technological environment.” *Id.* (citing *Benson* and *Flook*); *see, e.g., id.* at 187 (“It is now commonplace that an *application* of a law of nature or mathematical formula to a known structure or process may well be deserving of patent protection.”).

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

B. USPTO Guidance

The PTO recently published revised guidance in the Federal Register concerning the application of § 101. *2019 Revised Patent Subject Matter Eligibility Guidance*, 84 Fed. Reg. 50 (January 7, 2019) (hereinafter “Guidance”) (<https://www.govinfo.gov/content/pkg/FR-2019-01-07/pdf/2018-28282.pdf>).

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);⁵ and

⁵ Referred to as “*Revised Step 2A, Prong 1*” in the Guidance (hereinafter “*Step 2A(i)*”).

(2) additional elements that integrate the judicial exception into a practical application (*see* MPEP §§ 2106.05(a)–(c), (e)–(h)).⁶

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

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

(4) simply appends well-understood, routine, conventional activities previously known to the industry, specified at a high level of generality, to the judicial exception.⁷

See Guidance.

Step 2A(i) – Abstract Idea

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

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

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

⁶ Referred to as “*Revised Step 2A, Prong 2*” in the Guidance (hereinafter “*Step 2A(ii)*”).

⁷ Items (3) and (4) continue to be collectively referred to as “*Step 2B*” of the Supreme Court’s two-step framework, described in *Mayo* and *Alice*.

relationships or interactions between people (including social activities, teaching, and following rules or instructions); and

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

Under the Guidance, if the claim does not recite a judicial exception (a law of nature, natural phenomenon, or subject matter within the enumerated groupings of abstract ideas above), then the claim is patent-eligible at *Step 2A(i)*. This determination concludes the eligibility analysis, except in situations identified in the Guidance.⁸

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

Step 2A(ii) – Practical Application

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

⁸ In the rare circumstance in which an examiner believes a claim limitation that does not fall within the enumerated groupings of abstract ideas should nonetheless be treated as reciting an abstract idea, the procedure described in of the Guidance for analyzing the claim should be followed. *See* Guidance, Section III.C.

The seven identified “practical application” sections of the MPEP,⁹ cited in the Guidance under *Step 2A(ii)*, are:

- (1) MPEP § 2106.05(a) Improvements to the Functioning of a Computer or To Any Other Technology or Technical Field
- (2) MPEP § 2106.05(b) Particular Machine
- (3) MPEP § 2106.05(c) Particular Transformation
- (4) MPEP § 2106.05(e) Other Meaningful Limitations
- (5) MPEP § 2106.05(f) Mere Instructions To Apply An Exception
- (6) MPEP § 2106.05(g) Insignificant Extra-Solution Activity
- (7) MPEP § 2106.05(h) Field of Use and Technological Environment

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

Step 2B – “Inventive Concept” or “Significantly More”

Under our precedent, it is possible that a claim that does not “integrate” a recited judicial exception under *Step 2A(ii)* is nonetheless patent eligible. For example, the claim may recite additional elements that render the claim patent eligible even though a judicial exception is recited in a separate claim element.¹⁰ The Federal Circuit has held claims eligible at

⁹ See MPEP §§ 2106.05(a)–(c), (e)–(h). Citations to the MPEP herein refer to revision [R-08.2017].

¹⁰ See, e.g., *Diehr*, 450 U.S. at 187.

the second step of the *Alice/Mayo* test (USPTO *Step 2B*) because the additional elements recited in the claims provided “significantly more” than the recited judicial exception (e.g., because the additional elements were unconventional in combination).¹¹ Therefore, if a claim has been determined to be directed to a judicial exception under *Revised Step 2A*, we must evaluate the additional elements individually and in combination under *Step 2B* to determine whether they provide an inventive concept (i.e., whether the additional elements amount to significantly more than the exception itself).¹²

Under the Guidance, we must consider in *Step 2B* whether an additional element or combination of elements: (1) “Adds a specific limitation or combination of limitations that are not well-understood, routine, conventional activity in the field, which is indicative that an inventive concept may be present;” or (2) “simply appends well-understood, routine, conventional activities previously known to the industry, specified at a high level of generality, to the judicial exception, which is indicative that an inventive concept may not be present.” *See* Guidance, III.B.¹³

¹¹ *See, e.g., Amdocs (Israel), Ltd. v. Openet Telecom, Inc.*, 841 F.3d 1288, 1300, 1304 (Fed. Cir. 2016); *BASCOM Global Internet Servs., Inc. v. AT&T Mobility LLC*, 827 F.3d 1341, 1349–52 (Fed. Cir. 2016); *DDR Holdings, LLC v. Hotels.com, L.P.*, 773 F.3d 1245, 1257–59 (Fed. Cir. 2014).

¹² The patent eligibility inquiry may contain underlying issues of fact. *Mortg. Grader, Inc. v. First Choice Loan Servs. Inc.*, 811 F.3d 1314, 1325 (Fed. Cir. 2016). In particular, “[t]he question of whether a claim element or combination of elements is well-understood, routine and conventional to a skilled artisan in the relevant field is a question of fact.” *Berkheimer v. HP Inc.*, 881 F.3d 1360, 1368 (Fed. Cir. 2018).

¹³ In accordance with existing *Step 2B* guidance, an Examiner’s conclusion that an additional element (or combination of elements) is well understood,

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

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

See Berkheimer Memo.

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

- (a) Adds a specific limitation or combination of limitations that are not well-understood, routine, conventional

routine, conventional activity must be supported with a factual determination. For more information concerning evaluation of well-understood, routine, conventional activity, *see* MPEP § 2106.05(d), as modified by the USPTO *Berkheimer* Memorandum (USPTO Commissioner for Patents Memorandum dated Apr. 9, 2018, “Changes in Examination Procedure Pertaining to Subject Matter Eligibility, Recent Subject Matter Eligibility Decision (*Berkheimer v. HP, Inc.*)” (hereinafter “*Berkheimer Memo*”).

activity in the field, which is indicative that an inventive concept may be present; or

(b) Simply appends well-understood, routine, conventional activities previously known to the industry, specified at a high level of generality, to the judicial exception, which is indicative that an inventive concept may not be present.

Guidance, *and see Berkheimer* Memo.

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

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

ANALYSIS

Step 1

Claim 1, as a method claim, recites one of the enumerated categories of eligible subject matter in 35 U.S.C. § 101. Therefore, the issue before us is whether it is directed to a judicial exception without significantly more.

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

The Examiner determined that the claims are “directed to ‘specifying desired objective for content posting’ in content publishing” (Final Act. 2), and further elaborates that claim 1 recites “receiving information . . . publishing content, identifying attributers and updating target audience steps

which are considered to be ‘An idea of itself’ (that can be performed in the human mind or by [using] pen and paper),” and cites various Federal Circuit precedential cases in support. Ans. 2.

Claim 1 does not recite the judicial exceptions of either natural phenomena or laws of nature. Further, “an idea of itself” is no longer a category included in the Guidance, and therefore we reevaluate whether an abstract idea is recited by claim 1 based upon the Guidance.

We agree with the Examiner that claim 1 merely receives, compares, and publishes data, which is a mental process that can be performed in the human mind and/or by pen and paper. *Id.* We find this type of activity, i.e., comparing information using rules to make a determination,¹⁴ for example, includes longstanding conduct that existed well before the advent of computers and the Internet, and could be carried out by a human with pen and paper. *See CyberSource Corp. v. Retail Decisions, Inc.*, 654 F.3d 1366, 1375 (Fed. Cir. 2011) (“That purely mental processes can be unpatentable, even when performed by a computer, was precisely the holding of the Supreme Court in *Gottschalk v. Benson.*”).¹⁵

Our reviewing court has previously held other patent claims ineligible for reciting similar abstract concepts. For example, while the Supreme

¹⁴ Claim 1 recites, in pertinent part, “identifying commonly possessed member profile attributes of those members of the target audience who, having viewed the content posting, interacted with the content posting in a manner consistent with the desired objective.” Claims App’x. We identify this limitation as reciting an abstract idea.

¹⁵ *CyberSource* further guides that “a method that can be performed by human thought alone is merely an abstract idea and is not patent-eligible under § 101.” *CyberSource*, 654 F.3d at 1373.

Court has enhanced the § 101 analysis since *CyberSource* in cases like *Mayo* and *Alice*, the Federal Circuit continues to ““treat[] analyzing information by steps people go through in their minds, . . . without more, as essentially mental processes within the abstract-idea category.”” *Synopsys, Inc. v. Mentor Graphics Corp.*, 839 F.3d 1138, 1146–47 (Fed. Cir. 2016) (quoting *Elec. Power Grp. v. Alstom S.A.*, 830 F.3d 1350, 1354 (Fed. Cir. 2016)).

In addition, our reviewing court has concluded that abstract ideas include the concepts of collecting data, recognizing certain data within the collected data set, and storing the data in memory. *Content Extraction & Transmission LLC v. Wells Fargo Bank, N.A. Ass’n*, 776 F.3d 1343, 1347 (Fed. Cir. 2014). Additionally, the collection of information and analysis of information (e.g., recognizing certain data within the dataset) are also abstract ideas. *Elec. Power*, 830 F.3d at 1353–54 (collecting information and “analyzing information by steps people go through in their minds, or by mathematical algorithms, without more, [are] essentially mental processes within the abstract-idea category”). Similarly, “collecting, displaying, and manipulating data” is an abstract idea. *Intellectual Ventures I LLC v. Capital One Fin. Corp.*, 850 F.3d 1332, 1340 (Fed. Cir. 2017). Also, collecting and comparing known information has been determined to be an abstract idea. *Classen Immunotherapies, Inc. v. Biogen IDEC*, 659 F.3d 1057, 1067 (Fed. Cir. 2011) (“Claim 1 of the ’283 patent states the idea of collecting and comparing known information”). Also, more recently, our reviewing court has also concluded that acts of parsing, comparing, storing, and editing data are abstract ideas. *Berkheimer*, 881 F.3d at 1366.¹⁶

¹⁶ Our reviewing court recognizes that “[a]n abstract idea can generally be described at different levels of abstraction.” *Apple, Inc. v. Ameranth, Inc.*,

Moreover, the Specification provides evidence as to what the claimed invention is directed to. In this case, the Specification discloses that the invention “generally relates to data processing systems,” and more specifically,

to methods, systems and computer program products that facilitate the making of recommendations to members of a social networking application or service regarding content campaigns generally, and sponsored content campaigns in particular, where the recommendations are directed to enabling members to achieve one of several desired objectives with a content campaign.

Spec. ¶ 2. Claim 1¹⁷ provides additional evidence by reciting a method in which “subsequent to the content posting be[ing] viewed by a threshold number of members, identifying commonly possessed member profile attributes of those members of the target audience who, having viewed the content posting, interacted with the content posting in a manner consistent with the desired objective.” Claims App’x. We conclude this limitation recites an abstract idea.¹⁸

842 F.3d 1229, 1240 (Fed. Cir. 2016). That need not and, in this case does not, “impact the patentability analysis.” *Id.* at 1241.

¹⁷ In the event of further prosecution, the apparent typographical error in the claim in which it appears the word “be” should be replaced by “being.”

¹⁸ The Specification in the Abstract describes the invention as relating to “[t]echniques to dynamically adjust a target audience for a content posting” in which “a member-targeting optimization module dynamically adjusts the targeted audience of members who are presented with the content posting, with a view to increasing the likelihood that the desired objective will be achieved.” Spec. 28 (Abstract). Thus, this intrinsic evidence shows that claim 1 is directed to collecting and analyzing (survey) data. This is consistent with the Examiner’s determination.

Thus, under *Step 2A(i)*, we conclude claim 1 recites the abstract idea of receiving, organizing, and comparing data, and using rules to make a determination, i.e., “identifying commonly possessed member profile attributes of those members of the target audience who, having viewed the content posting, interacted with the content posting in a manner consistent with the desired objective.” Claim 1.

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

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

In addition to the abstract “identifying commonly possessed member profile attributes” limitation identified in *Step 2A(i)*, *supra*, claim 1 recites (1) “receiving information identifying a content posting”; (2) “receiving information indicating a desired objective for the content posting”; (3) “receiving information identifying member profile attributes defining those members to be included in an original target audience”; and (4) “publishing the content posting via a content publishing platform.”

As to the specific limitations, we find limitations (1) through (3) recite insignificant data gathering. *See* MPEP § 2106.05(g). Data gathering, as performed by the steps or function in Appellants’ claims, is a classic

example of insignificant extra-solution activity. *See, e.g., In re Bilski*, 545 F.3d 943, 963 (Fed. Cir. 2008) (en banc), *aff'd sub nom, Bilski v. Kappos*, 561 U.S. 593 (2010).

We also find limitation (4) recites insignificant post solution activity.¹⁹ The Supreme Court guides that the “prohibition against patenting abstract ideas ‘cannot be circumvented’ [by] adding ‘insignificant postsolution activity.’” *Bilski*, 561 U.S. at 610–11 (quoting *Diehr*, 450 U.S. at 191–92).

Appellants rely upon the Federal Circuit’s holding in *DDR Holdings*²⁰ to contend alleged improvements in computer operation that allow claims to pass the abstract idea test in *Alice*. Br. 27–28. However, we disagree that the claimed invention improves the operation of the computer system itself.

Instead, we find Appellants’ argument persuasive that “the claims are directed to a problem in conventional industry practice of content publishing in social networking services [such that], like *Diehr*, the claims improve an existing technological process, such as improving the targeting of content to members of a social networking service, in such a manner that allows the content published to achieve one of several expressly selected desired objectives.” Br. 26.²¹

¹⁹ The “receiving” steps can be carried out by a human in the mind or by use of pen and paper. *See CyberSource*, 654 F.3d at 1375.

²⁰ *See* n.11, *supra*.

²¹ Because we agree with at least one of the dispositive arguments advanced by Appellants, we need not reach the merits of Appellants’ other arguments. *See Beloit Corp. v. Valmet Oy*, 742 F.2d 1421, 1423 (Fed. Cir. 1984) (finding an administrative agency is at liberty to reach a decision based on “a single dispositive issue”).

While Appellants' claims do not operate the recited generic computer components in an unconventional manner to achieve an improvement in computer functionality (*see* MPEP § 2106.05(a)), the limitation of “automatically updating the original target audience with a revised target audience by excluding some members of the social networking service who do not possess the commonly occurring member profile attributes,” is different than those limitations identified above that merely recite extra-solution activity. This limitation improves the functionality of a social networking service.

Accordingly, we conclude, when the claim is considered as a whole, the recited judicial exception is integrated into a practical application as determined under at least MPEP section § 2106.05(a) cited above, such that the claim is patent-eligible.

Because the claims are directed to a patent-eligible concept, as we conclude above, this concludes the patent-eligibility inquiry.

Therefore, based upon the findings and legal conclusions above, on this record, we are persuaded of error in the Examiner's conclusion that the claims are drawn to patent-ineligible subject matter, and we do not sustain the § 101 rejection of claim 1, and grouped claims 2–17 which stand therewith. *See* Claim Grouping, *supra*.

2. § 102(a)(1) Rejection R2 of Claims 1, 2, 4–10, and 12–17

Issue 2

Appellants argue (Br. 8–9) the Examiner's rejection of claim 1 under 35 U.S.C. § 102(a)(1) as being anticipated by Manoogian is in error. These contentions present us with the following issue:

Did the Examiner err in finding the cited prior art discloses a method that includes, *inter alia*, the steps of (a) “receiving information indicating a desired objective for the content posting”; and (b) “receiving information identifying member profile attributes defining those members to be included in an original target audience to whom the content posting is to be presented,” as recited in claim 1?

Analysis

Limitation (a): “desired objective”

Initially, the Examiner cites paragraph 12 of Manoogian as disclosing this limitation. Final Act. 4. Appellants criticize this finding by contending “a careful review of this paragraph reveals that Manoogian does not describe or suggest receiving any information that explicitly specifies a desired objective to be achieved with a content posting, as described and claimed [because] paragraph [0012] of Manoogian describes ‘receiving an advertisement summary,’” (Br. 8), and “nowhere is there any suggestion that the advertisement summary includes specific information specifying a desired objective for the advertisement.” Br. 8–9.

In response, the Examiner cites paragraph 9 of the reference in the Answer (4), and further elaborates on the disclosure of Manoogian under the broadest reasonable interpretation of the claim²² in light of Appellants’ Specification:

²² During prosecution, claims must be given their broadest reasonable interpretation when reading claim language in light of the specification as it would be interpreted by one of ordinary skill in the art. *In re Am. Acad. of Sci. Tech. Ctr.*, 367 F.3d 1359, 1364 (Fed. Cir. 2004). Under this standard, we interpret claim terms using “the broadest reasonable meaning of the

Manoogain [sic] teaches receiving an advertisement summary, receiving a target audience size, selecting a user audience based on the audience size . . . the method may additionally provide feedback to advertisers on the projected number of advertisements viewed or impressions based on the targeted criteria . . . to adjust target audience over time (see [0009]). [Manoogian] teaches receiving, from an advertiser or a content provider or any party that wishes to feed targeted content, an advertisement summary . . . the advertisement summary having any suitable data format for which any target persona may be defined . . . may include keyword (to bid on) and also to select from a set of predefined personas, wherein the persona is generated from groups of related users, for example the base summary may be defined to describe a persona that is a 28 year old male in San Francisco that has interests related to hiking, green initiatives, charities . . . that has a following of 400 other users and is frequently mentioned . . . [] teaches such persona may not match many people, but such an advertisement summary may be used to abstract to a larger audience in subsequent steps (see [0012]). [Manoogian] also teaches the step of adjusting the advertisement summary may account for additionally account for an audience restriction, which functions to limit which users that may be included in the user audience . . . the audience restriction is a persona restriction, where the users affiliated with certain persona are excluded from the user audience (see [0016])[.]

Selecting target persona such as selecting 28 year old male . . . interested in . . . having follower of . . . are considered information indicating desired objectives.

Ans. 4–5 (emphasis added). Appellants do not rebut the Examiner’s factual findings in the Answer by filing a Reply Brief.

words in their ordinary usage as they would be understood by one of ordinary skill in the art, taking into account whatever enlightenment by way of definitions or otherwise that may be afforded by the written description contained in the applicant’s specification.” *In re Morris*, 127 F.3d 1048, 1054 (Fed. Cir. 1997).

Therefore, we agree with the Examiner's unrebutted finding that Manoogian discloses "receiving information indicating a desired objective for the content posting," as recited in claim 1. *Id.*

Limitation (b): "member profile attributes"

Initially, the Examiner cites paragraph 11 of Manoogian as disclosing this limitation. Final Act. 4. Appellants argue Manoogian discloses a user summary, preferably of weighted keywords that "are not provided by the advertiser for the purposes of defining a target audience." Br. 9. "[T]o the extent that Manoogian describes receiving information specifying a target audience, the information received is not 'member profile attributes' but keywords associated with an advertisement, *as described in paragraph [0012] of Manoogian.*" Br. 9 (emphasis added).

In response, the Examiner cites *paragraph 27* of the reference in the Answer (5), and further finds, "Manoogain [sic] teaches a system for scaling persona targeted advertisement, including a persona database which includes a persona characteristics of users of social network (audience of a social network) and a campaign planner including input fields for a user to supply the system with an initial target audience." Ans. 5 (citing Manoogian ¶ 27).

As mentioned above, Appellants have not filed a Reply Brief to rebut the Examiner's factual findings. Therefore, we agree with the Examiner's finding that Manoogian discloses "receiving information identifying member profile attributes defining those members to be included in an original target audience to whom the content posting is to be presented," as recited in claim 1. *Id.*

Based on the findings above, we are not persuaded of error in the Examiner's reliance on the cited prior art to disclose the disputed limitations of claim 1, nor do we find error in the Examiner's resulting finding of anticipation. Therefore, we sustain the Examiner's anticipation rejection of independent claim 1, and grouped claims 2, 4–10, and 12–17 which fall therewith. *See Claim Grouping, supra.*

3. § 102(a)(1) Rejection R2 of Claims 3 and 11

Issue 3

Appellants argue (Br. 9–10) the Examiner's rejection of claim 3 under 35 U.S.C. § 102(a)(1) as being anticipated by Manoogian is in error. These contentions present us with the following issue:

Did the Examiner err in finding the cited prior art discloses “[t]he method of claim 1,” wherein the step of “receiving information indicating a desired objective for the content posting” includes:

causing a plurality of user-selectable desired objectives for the content posting to be presented; and

receiving information indicating a selection of one of the plurality of desired objectives for the content posting, the plurality of desired objectives selected from the group consisting of:

- i) maximizing the number of members who “like” the content posting,
- ii) maximizing the number of members whom-share the content posting,
- iii) maximizing the number of members who comment on the content posting,

- iv) maximizing the number of members who elect to follow the entity on whose behalf the content posting has been published, and
- v) maximizing the number of members who select a link to a third-party hosted web page[,]

as recited in claim 3?

Analysis

The Examiner cites Manoogian paragraphs 12 through 15 as disclosing the contested limitations of claim 3. Final Act. 4–5.

Appellants contend:

Manoogian does not describe or suggest either of the above-quoted claim elements from claim 3. . . . First, Applicants refer the Examiner to Figure 4 of Applicants’ specification, which provides an example user interface that presents, “a plurality of user-selectable desired objectives for [a] content posting to be presented,” as recited in Applicants’ claim 3. Manoogian does not describe or suggest anything remotely similar to that which is illustrated in Figure 4, and more importantly, claimed in Applicants’ claim 3. For instance, claim 3 specifically sets forth no less than five specific desired objectives from which a content publisher might select. Manoogian does not describe or suggest any one of the five explicit and detailed desired objectives set forth in Applicants’ claim.

Br. 10.

We first point out, “[i]n the patentability context, claims are to be given their broadest reasonable interpretations . . . limitations are not to be read into the claims from the specification.” *In re Van Geuns*, 988 F.2d 1181, 1184 (Fed. Cir. 1993) (citations omitted).

Moreover, the Examiner provides further analysis and claim construction in the Answer.

Manoogain [sic] teaches a selection from a plurality of user-selectable desired objectives to be presented and receiving information indicating a selection of one of the plurality of desired objectives. Examiner would like to point out the claim recites displaying and selecting an intended result (maximizing a result when some kind of step is performed) which should not be given a patentable weight. The claim does not recite any steps to be taken to maximize an end result. However [Manoogian] also teaches selecting from a plurality of options to maximize desired objectives (such as members who would like the content, share the content, comment on the content, who would elect to follow the entity and also select a link). The advertisers or content provider of [Manoogian] would maximize or increase those objectives by selecting a keyword, the size of the audience, the type of the audience, etc., in an environment which includes the features of “like”, “share”, “comment”, “follow” and “link”, i.e., a social network environment.

Ans. 5–6.

Appellants do not respond to the Examiner’s clarified findings and claim construction. Based on the findings above, we are not persuaded of error in the Examiner’s reliance on the cited prior art to disclose the disputed limitations of claim 3, nor do we find error in the Examiner’s resulting finding of anticipation. Therefore, we sustain the Examiner’s anticipation rejection of dependent claim 3, and grouped claim 11, which falls therewith. *See Claim Grouping, supra.*

CONCLUSIONS

(1) The Examiner erred with respect to patent-ineligible subject matter Rejection R1 of claims 1–17 under 35 U.S.C. § 101, and we do not sustain the rejection.

(2) The Examiner did not err with respect to anticipation Rejection R2 of claims 1–17 under 35 U.S.C. § 102(a)(1), and we sustain the rejection.

Because we have affirmed at least one ground of rejection with respect to each claim on appeal, we affirm the Examiner’s decision. *See* 37 C.F.R. § 41.50(a)(1).

DECISION

We affirm the Examiner’s decision rejecting claims 1–17.

No time period for taking any subsequent action in connection with this appeal may be extended under 37 C.F.R. § 1.136(a)(1)(iv). *See* 37 C.F.R. § 41.50(f).

AFFIRMED