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UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

Ex parte DMITRY SHEVELENKO, LOREN ALFRED CHENG,
YEGNASHANKAR PARASURAM, CHRISTOPHER TRIOLO,
RESHMA KHILNANI, and EDWARD ZAGAT¹

Appeal 2017-001536
Application 13/437,823
Technology Center 3600

Before ST. JOHN COURTENAY III, JAMES R. HUGHES, and
JOYCE CRAIG, *Administrative Patent Judges*.

HUGHES, *Administrative Patent Judge*.

DECISION ON APPEAL

STATEMENT OF THE CASE

Appellants seek our review under 35 U.S.C. § 134(a) of the Examiner's decision rejecting claims 1–12, which are all the claims pending in this application. Final Act. 1, 2.² We have jurisdiction under 35 U.S.C. § 6(b). We affirm.

¹ According to Appellants, the real party in interest is Facebook, Inc. Appeal Br. 2.

² We refer to Appellants' Specification ("Spec.") filed Apr. 2, 2012; Appeal Brief ("Appeal Br.") filed June 2, 2016; and Reply Brief ("Reply Br.") filed Nov. 8, 2016. We also refer to the Examiner's Final Office Action (Final

Appellants' Invention

The invention relates generally to “social networking,” and particularly to providing “social punch cards to users of a social networking system.” Spec. ¶ 1. More particularly, the invention relates to methods of maintaining a set of social punch cards utilizing a computer (processor). *See* Spec. ¶¶ 3–6; Abstract.

Representative Claim

Independent claim 1, reproduced below, further illustrates the invention:

1. A method comprising:

maintaining, by a processor, a set of social punch cards in a social networking system, each social punch card in the set describing an electronic count of punches associated with the social punch card that have been performed by a plurality of users, the social punch card including a definition of an action that will credit the electronic count of punches, a target count of punches for completing the social punch card, and a reward to be provided to each user for reaching the target count of punches;

identifying a subject user of the social networking system to join a punch card of the set;

generating, by the processor, a numeric affinity score for each of the social punch cards of the set, by:

identifying users associated with each social punch card,

determining an affinity coefficient of the identified subject user for each of the users associated with the social punch card based on previous interactions in the social networking system between the identified subject user and the user associated with the social punch card, and

Rejection (“Final Act.”) mailed Aug. 20, 2015, and Answer (“Ans.”) mailed Sept. 12, 2016.

determining the numeric affinity score for the social punch card based on the determined affinity coefficients for the users associated with the social punch card;

selecting a social punch card from the set based on the generated affinity scores;

associating the identified subject user with the selected social punch card;

receiving information indicating that one or more of the users associated with the social punch card have performed the action;

crediting the count of punches on the social punch card based on the actions performed; and

responsive to the target count of punches being reached for the social punch card, providing, by the processor, the reward to each user associated with the social punch card.

Rejections on Appeal

1. The Examiner rejects claims 1–12 under 35 U.S.C. § 101 as being directed to non-statutory subject matter.
2. The Examiner rejects claims 1 and 12 under pre-AIA 35 U.S.C. § 112, first paragraph, as failing to comply with the enablement requirement.
3. The Examiner rejects claims 1, 2, and 12 under pre-AIA 35 U.S.C. § 103(a) as being unpatentable over Pacheco E Murta et al. (US 2011/0270617 A1, published Nov. 3, 2011) (“Pacheco E Murta”), Eldred et al. (US 2006/0059040 A1, published Mar. 16, 2006) (“Eldred”), Joa et al. (US 2011/0246272 A1, published Oct. 6, 2011) (“Joa”), Clyne (US 2011/0264497 A1, published Oct. 27, 2011), and Chudnovsky et al. (US 7,881,963 B2, issued Feb. 1, 2011) (“Chudnovsky”).

4. The Examiner rejects claim 3 under pre-AIA 35 U.S.C. § 103(a) as being unpatentable over Pacheco E Murta, Eldred, Joa, Clyne, Chudnovsky, and Looney et al. (US 2011/0208852 A1, published Aug. 25, 2011) (“Looney”).

5. The Examiner rejects claims 4–7 under pre-AIA 35 U.S.C. § 103(a) as being unpatentable over Pacheco E Murta, Eldred, Joa, Clyne, Chudnovsky, and Walker et al. (US 2003/0018530 A1, published Jan. 23, 2003) (“Walker”).

6. The Examiner rejects claims 8, 9, and 11 under pre-AIA 35 U.S.C. § 103(a) as being unpatentable over Pacheco E Murta, Eldred, Joa, Clyne, Chudnovsky, and Wilens (US 7,092,952 B1, issued Aug. 15, 2006).³

7. The Examiner rejects claims 1–12 under pre-AIA 35 U.S.C. § 112, first paragraph, as failing to comply with the written description requirement.

ISSUES

Based upon our review of the record, Appellants’ contentions, and the Examiner’s findings and conclusions, the issues before us are as follows:

³ The Examiner’s ground of rejection lists Pacheco E Murta, Eldred, Joa, and Clyne, but omits Chudnovsky. *See* Final Act. 22. The Examiner, however, discusses Chudnovsky in the substantive rejection. *See* Final Act. 22. Because this ground of rejection includes claims dependent from claim 1, which is rejected over Pacheco E Murta, Eldred, Joa, Clyne, and Chudnovsky (*supra*), and the Examiner discusses Chudnovsky (*supra*), we find the Examiner’s typographical error (omission) to be harmless and correct the typographical error for clarity and consistency. We also note that claim 10 is not included in this ground of rejection or any other prior art rejection before us.

1. Did the Examiner err in finding claims 1–12 were directed to patent ineligible subject matter under 35 U.S.C. § 101?

2. Did the Examiner err in finding claims 1 and 12 failed to comply with the enablement requirement under 35 U.S.C. § 112, first paragraph?

3. Did the Examiner err in finding claims 1–12 failed to comply with the written description requirement under 35 U.S.C. § 112, first paragraph?

4. Did the Examiner err in finding that the combination of Pacheco E Murta, Eldred, Joa, Clyne, and Chudnovsky collectively would have taught or suggested:

determining an affinity coefficient of the identified subject user for each of the users associated with the social punch card based on previous interactions in the social networking system between the identified subject user and the user associated with the social punch card, and

determining the numeric affinity score for the social punch card based on the determined affinity coefficients for the users associated with the social punch card

as recited in Appellants' claim 1?

ANALYSIS

The 35 U.S.C. § 101 Rejection of Claims 1–12

Appellants argue independent claim 1, independent claim 12, and dependent claims 2–11 together as a group with respect to the § 101 rejection. *See* Appeal Br. 7–18.

The Examiner rejects claim 1 (and claims 2–12) as being directed to patent-ineligible subject matter (*see generally* Final Act. 2–4; Ans. 4–6) in

that the claimed invention “is directed to a judicial exception (i.e., . . . an abstract idea) without significantly more” because the claim is “directed to maintaining social punch cards in a social networking system,” which is “a method of organizing human activity.” Final Act. 4. The Examiner also explains, the claims:

do not include additional elements that are sufficient to amount to significantly more than the judicial exception because the claims do not recite an improvement to another technology or technical field, nor do they recite an improvement to the functioning of the computer itself. The claims require no more than a generic computer to perform generic computer functions that are well-understood, routine and conventional activities previously known to the industry

Final Act. 4. Additionally, the Examiner explains how the limitations of claim 1 are directed to a method of organizing human activity, analogous to the claims found patent ineligible (as abstract) in *Planet Bingo*.⁴ See Final Act. 2–3.

Specifically, the Examiner explains that “[a]ll of the steps [(of the method of claim 1)] are steps for maintaining social punch cards that could be executed mentally or on paper.” The “claims recite an abstract idea[,] . . . [g]athering data and manipulating data using a computer processor is well known and routine.” Further, the “invention is not rooted in computer technology—social networking exists outside of computers. Graphs, including social graphs, existed long before computers and now popular social networking websites.” Final Act. 3.

⁴ *Planet Bingo LLC v. VKGS LLC*, 576 Fed. Appx. 1005, 1006 (Fed. Cir. 2014) (determining that claims to a computer-aided management system for bingo games were directed to an abstract idea).

Appellants contend that the claims are not directed to an improper judicial exception or abstract idea because: (1) “the Examiner does not explain why maintaining social punch cards is a method of organizing human activity or would otherwise qualify as an abstract idea” (Appeal Br. 10), and the Examiner “neglect[ed] to compare the proposed abstract idea with abstract ideas identified by the courts and explain how the proposed concept is similar to those found by the courts to be exceptions to the eligible categories specified in section 101” (Appeal Br. 10; *see* Appeal Br. 10–12); (2) the Examiner’s “definition of the alleged abstract idea is problematic” because the identified purportedly abstract idea—maintaining social punch cards in a social networking system—“cannot be an abstract idea when it encompasses only one specific method for encouraging behavior from users when there are many other ways of doing so” (Ans. 13); (3) the Examiner misconstrues the claim and proposes an overly broad concept as the purported abstract idea to which the claim is directed in that the claim “contain[s] numerous limitations that are not directed to ‘maintaining a social punch card in a social networking system’” (Appeal Br. 15; *see* Appeal Br. 14–15); and (4) the claim recites significantly more than the proposed abstract idea in that the claim “limitations are not merely generic steps in the process of ‘maintaining social punch cards in a social networking system[,]’” (Appeal Br. 16) but instead “specify a particular and unconventional method of assigning a user to a social punch card, namely by determining a numeric affinity score for the social punch card based on the affinity coefficients” (Appeal Br. 16–17; *see* Appeal Br. 16–18). *See* Appeal Br. 7–18; Reply Br. 7–14.

Under 35 U.S.C. § 101, a patent may be obtained for “any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof.” The Supreme Court has “long held that this provision contains an important implicit exception: Laws of nature, natural phenomena, and abstract ideas are not patentable.” *Alice Corp. Pty. Ltd. v. CLS Bank Int’l*, 134 S. Ct. 2347, 2354 (2014) (quoting *Ass’n for Molecular Pathology v. Myriad Genetics, Inc.*, 569 U.S. 576, 589 (2013)).

The Supreme Court, in *Alice*, reiterated the two-step framework previously set forth in *Mayo Collaborative Services v. Prometheus Laboratories, Inc.*, 566 U.S. 66, 77–80 (2012), “for distinguishing patents that claim laws of nature, natural phenomena, and abstract ideas from those that claim patent-eligible applications of those concepts.” *Alice*, 134 S. Ct. at 2355. Assuming that a claim nominally falls within one of the statutory categories of machine, manufacture, process, or composition of matter, the first step in the analysis is to “determine whether the claims at issue are directed to one of those patent-ineligible concepts” (*id.*), e.g., to an abstract idea. For example, abstract ideas include, but are not limited to, fundamental economic practices, methods of organizing human activities, an idea of itself, and mathematical formulas or relationships. *Id.* at 2355–57. If the claims are not directed to an abstract idea, the inquiry ends. Otherwise, the inquiry proceeds to the second step where the elements of the claims are considered “individually and ‘as an ordered combination’ to determine whether the additional elements ‘transform the nature of the claim’ into a patent-eligible application.” *Alice*, 134 S. Ct. at 2355 (quoting *Mayo*, 566 U.S. at 78, 79). This second step is described as “a search for an ““inventive

concept”—*i.e.*, an element or combination of elements that is ‘. . . significantly more than . . . the [ineligible concept] itself.’” *Id.* at 2355 (alteration in original) (quoting *Mayo*, 566 U.S. at 72–73).

The Court acknowledged in *Mayo*, that “all inventions at some level embody, use, reflect, rest upon, or apply laws of nature, natural phenomena, or abstract ideas.” *Mayo*, 566 U.S. at 71. We, therefore, look to whether the claims focus on a specific means or method that improves the relevant technology or are instead directed to a result or effect that itself is the abstract idea and merely invoke generic processes and machinery. *See Enfish, LLC v. Microsoft Corp.*, 822 F.3d 1327, 1336 (Fed. Cir. 2016).

Alice Step 1 Analysis

Turning to the first step of the eligibility analysis, “[t]he 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*, 822 F.3d at 1335–36. “The abstract idea exception prevents patenting a result where ‘it matters not by what process or machinery the result is accomplished.’” *McRO, Inc. v. Bandai Namco Games America Inc.*, 837 F.3d 1299, 1312 (Fed. Cir. 2016) (quoting *O’Reilly v. Morse*, 56 U.S. (15 How.) 62, 113 (1853)). “We therefore look to whether the claims . . . focus on a specific means or method that improves the relevant technology or are instead directed to a result or effect that itself is the abstract idea and merely invoke generic processes and machinery.” *McRO*, 837 F.3d at 1314.

Instead of using a fixed definition of an abstract idea and analyzing how claims fit (or do not fit) within the definition, “the decisional mechanism courts now apply is to examine earlier cases in which a similar or parallel descriptive nature can be seen — what prior cases were about, and which way they were decided.” *Amdocs (Isr.) Ltd. v. Openet Telecom, Inc.*, 841 F.3d 1288, 1294 (Fed. Cir. 2016) (citing *Electric Power Group, LLC v. Alstom S.A.*, 830 F.3d 1350, 1353–54 (Fed. Cir. 2016)). As part of this inquiry, we must “look at the ‘focus of the claimed advance over the prior art’ to determine if the claim’s ‘character as a whole’ is directed to excluded subject matter.” *Affinity Labs of Texas, LLC v. DirectTV, LLC*, 838 F.3d 1253, 1257 (Fed. Cir. 2016).

The Examiner determines claim 1 is directed to the abstract idea of “maintaining social punch cards in a social networking system,” which is “a method of organizing human activity.” Final Act. 4. The Examiner also finds the limitations of claim 1 are analogous to claims found patent ineligible in *Planet Bingo*. See Final Act. 2–3. The Examiner further counters Appellants’ arguments concerning the Examiner’s prima facie case and the allegedly improper proposed abstract idea. See Ans. 4–5. Conversely, Appellants attack the Examiner’s findings of fact and legal conclusions on numerous grounds (*supra*) without explaining why Appellants’ claims are not analogous to those in *Planet Bingo* or how the claims are analogous to claims deemed not to be abstract by the courts. See Appeal Br. 8–15; Reply Br. 7–14.

Initially, we agree that the Examiner’s determination that Appellants’ claim 1 is directed to “maintaining social punch cards in a social networking system,” which is “a method of organizing human activity.” Final Act. 4.

We also agree that the claims are analogous to those in *Planet Bingo*. See Final Act. 2–3.

With respect to the proposed abstract concept, although the Examiner could have characterized Appellants’ claim 1 with more detail, for example, as being directed to maintaining social punch cards in a social networking system including generating a numeric affinity score for each of the social punch cards and determining an affinity coefficient for each of the users associated with each social punch card (*see* Appeal Br. 15), such a characterization does not change the patent-eligibility analysis. See *Apple, Inc. v. Ameranth, Inc.*, 842 F.3d 1229, 1240–1241 (Fed. Cir. 2016) (“An abstract idea can generally be described at different levels of abstraction.”). The inclusion of additional limitations (resulting in a more detailed characterization) proffered by Appellants (*see* Appeal Br. 14–15) still amounts to organizing human activity and data collection, analysis, and manipulation (as discussed *infra*).

With respect to the Examiner’s *prima facie* case, as explained in our *Frye* decision, the Examiner has the initial burden—“to set forth the basis for any rejection so as to put the patent applicant on notice of the reasons why the applicant is not entitled to a patent on the claim scope that he seeks—the so-called ‘*prima facie* case.’” *Ex Parte Frye*, 94 USPQ2d 1072, 1075 (BPAI 2010) (Precedential). The USPTO carries its procedural burden when its rejection satisfies the requirements of 35 U.S.C. § 132 by notifying the applicant of the reasons for rejection, “together with such information and references as may be useful in judging the propriety of continuing [the] prosecution of [the] application.” See *In re Jung*, 637 F.3d 1356, 1363 (Fed. Cir. 2011) (alteration in original). It is well-established that the Board may

affirm an Examiner’s rejection so long as Appellants have had “a fair opportunity to react to the thrust of the rejection.” *In re Jung*, 637 F.3d 1356, 1365 (Fed. Cir. 2011) (quoting *In re Kronig*, 539 F.2d 1300, 1302–03 (CCPA 1976)) (internal quotation marks omitted). The Examiner explains (*supra*) why the Appellants’ claims are directed to ineligible subject matter, and even analogizes claim 1 to the claims in Planet Bingo. We find the Examiner has met the notice requirements of § 132. Accordingly, Appellants’ contentions concerning the Examiner’s prima facie case are unpersuasive of Examiner error. Additionally, we note that Appellants mischaracterize the Examiner’s rejection and the relevant precedent. The Examiner’s rejection does not “summarily reject” or “simply conclude” “without providing a rationale or citing to facts on the record” that the claim is directed to “maintaining social punch cards in a social networking system,” which is “a method for organizing human activity” Appeal Br. 7; *see* Appeal Br. 8–11; Reply Br 14. Further, we are unaware of any precedent requiring the Examiner to “identify any precedential opinions to which the claimed subject matter was allegedly similar” (Appeal Br. 12). *See also* Reply Br. 14.

The Examiner provides a summary of the relevant claim limitations (*see* Final Act. 2–3), finds these limitations “are steps for maintaining social punch cards that could be executed mentally or on paper,” and explains that such processes are “a method of organizing human activity” similar to the claims of *Planet Bingo*. Ans. 2.

Here, Appellants’ claim 1 relates to maintaining (utilizing a processor) a set of social punch cards in a social networking system, where the punch cards are a (electronic) record of punches (punch counts). A user or users

perform (credit) the punches based on the punch card holder performing an action or fulfilling a requirement. The punch card includes a definition of an action that will cause punches to be credited, punch count for completing the punch card, and a reward for completing the punch card. *See* claim 1; Appeal Br. 2; Spec. ¶¶ 2, 3, 14, 50. In other words, maintaining data structures, including a count, a definition of an action for crediting the count; and a limit or threshold, in a social networking system.

The claim also relates to identifying a user of the social networking system to associate with (join) a punch card; generating a numeric affinity score (by an undisclosed algorithm) for each punch card based on an affinity coefficient for each associated user, which in turn is based on previous interactions in the social networking system with other users associated with the social punch card; and selecting a social punch card based on the generated affinity scores. *See* claim 1; Appeal Br. 2–3; Spec. ¶¶ 14, 28, 33, 36, 48, 54, 56, 57. In other words, associating a user with a data structure based on previous interactions within the social media system between a user to be associated with a punch card and other users previously associated with a punch card. In summary, associating a user with a data structure (punch card) based on collected, analyzed, and manipulated data, which is organizing information relating to human activity.

Therefore, the claims broadly recite collecting, analyzing, organizing, and manipulating information (data) similar to known punch cards. *See* Abstract; Spec. ¶¶ 1–7, 13–17; Fig. 1. This is consistent with how Appellants describe the claimed invention. *See id.*; Spec. ¶¶ 60–62. Accordingly, we agree with the Examiner’s summary of the claim

limitations (for the collection, analysis, organization, and manipulation of punch card related data and social media information) as being directed to maintaining social punch cards in a social networking system.

Contrary to Appellants' assertions (*supra*), the present claims are directed to an abstract idea, in that the instant claims are analogous to a number of cases in which courts have identified similar claims as encompassing abstract ideas. *See* Final Act. 2–3; Ans. 4–5 (discussed *supra*).

Our reviewing court has held that abstract ideas include gathering, analyzing, organizing, and displaying information. *See Electric Power Group*, 830 F.3d at 1354 (finding “gathering and analyzing information of a specified content, then displaying the results,” to be directed to an abstract idea). Similarly, our reviewing court has held that abstract ideas include gathering, analyzing, organizing, and storing information. *See Content Extraction and Transmission LLC v. Wells Fargo Bank, Nat. Ass’n.*, 776 F.3d 1343, 1345, 1347 (Fed. Cir. 2014) (finding the “claims generally recite . . . recognizing specific information from the extracted data, and . . . storing that information in a memory” (*id.* at 1345) and that the “claims are drawn to the basic concept of data recognition and storage” (*id.* at 1347)). Also, collecting, analyzing, organizing, and manipulating information has been found to be a collection of abstract ideas. *See Two-Way Media Ltd. v. Comcast Cable Commc’ns, LLC.*, 874 F.3d 1329, 1337–38 (Fed. Cir. 2017) (finding claims directed to the functional results of accumulating, converting, and monitoring records manipulate data “but fail[] to do so in a non-abstract way” (*id.* at 1338)); *Intellectual Ventures I LLC v. Capital One Fin. Corp.*, 850 F.3d 1332, 1341 (Fed. Cir. 2017) (holding that the claimed

invention is directed to the abstract idea of “collecting, displaying, and manipulating data of particular documents”); *FairWarning IP, LLC v. Iatric Systems, Inc.*, 839 F.3d 1089, 1093–95 (Fed. Cir. 2016) (finding the claims were directed to a combination of abstract ideas including collecting and analyzing information and utilizing rules to determine fraud).

Here, the collection and analysis of punch card information and social media information is similar to the abstract idea of collecting, analyzing, organizing, and manipulating information discussed in *Electric Power Group.*, *Content Extraction*, *Two-Way Media*, *Intellectual Ventures I*, and *FairWarning*. Accordingly, we agree with the Examiner that the claims are directed to an abstract idea of collecting, analyzing, organizing, and manipulating information.

We also agree with the Examiner that the steps recited in claim 1 could be “performed mentally or on paper” similar to claims in *Planet Bingo*. Ans. 4–5. Claim 1, as explained *supra*, describes maintaining punch cards (data structures), including a count, a definition of an action for crediting the count, and a limit or threshold similar to well-known physical punch cards. The claim also includes additional limitations describing associating a user with a punch card based on affinity—previous interactions within the social media system between a user to be associated with a punch card and other users previously associated with a punch card. Although the affinity is determined utilizing a processor based on collected and analyzed data, human behavior also makes associations based on familiarity, affinity, and social interactions.

In that regard, our reviewing court has held that “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.” *Elec. Power Grp.*, 830 F.3d at 1354; *see also Synopsys, Inc. v. Mentor Graphics Corp.*, 839 F.3d 1138, 1146 (Fed. Cir. 2016) (“Methods which can be performed entirely in the human mind are unpatentable” (*id.*, quoting *Gottschalk v. Benson*, 409 U.S. 63, 67 (1972))); *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*). “[T]he fact that the required calculations could be performed more efficiently via a computer does not materially alter the patent eligibility of the claimed subject matter.” *Bancorp Servs., LLC v. Sun Life Assurance Co. of Can. (U.S.)*, 687 F.3d 1266, 1278 (Fed. Cir. 2012). Therefore, we find Appellants’ arguments (Appeal Br. 13; Reply Br. 8–10) unpersuasive and agree with the Examiner that a person could perform each process (step or function) in Appellants’ claim 1, either mentally, or using pen and paper. Thus, we agree with the Examiner that Appellants’ claims are directed to an abstract idea of collecting, analyzing, and manipulating information, which could be performed by purely mental processes.

Alice Step 2 Analysis

Having concluded Appellant’s claims are directed to an abstract concept under *Alice*’s step 1 analysis, we next address whether the claims add significantly more to the alleged abstract idea. As directed by our reviewing Court, we search for an “‘inventive concept’ sufficient to ‘transform the nature of the claim into a patent-eligible application.’”

McRO, 837 F.3d at 1312 (quoting *Alice*, 134 S. Ct. at 2355). The implementation of the abstract idea involved must be “more than performance of ‘well-understood, routine, [and] conventional activities previously known to the industry.’” *Content Extraction*, 776 F.3d at 1347–48 (alteration in original) (quoting *Alice*, 134 S. Ct. at 2359). The “inventive concept” “must be significantly more than the abstract idea itself, and cannot simply be an instruction to implement or apply the abstract idea on a computer.” *Bascom Global Internet Services, Inc. v. AT&T Mobility LLC*, 827 F.3d 1341, 1349 (Fed. Cir. 2016).

Here, the Examiner found that Appellants’ claims do not add significantly more. *See* Final Act. 2–4; Ans. 5–6. Appellants, on the other hand, contend that the Examiner’s analysis was faulty, in that “[n]one of the claim elements are similar in generality to the functions” (Appeal Br. 17) identified as well-understood, routine, and conventional activities by the USPTO, and “the claim, as a whole, is not a generic computer implementation of ‘maintaining social punch cards’ but provide[s] an innovative application of punch cards in a social networking system” (Appeal Br. 18). *See* Appeal Br. 15–18.

Appellants fail to persuade us of error in the Examiner’s rejection with respect to the second *Alice* step. Here Appellants repeat the limitations of claim 1—asserting that the limitations are not “generic steps in the process” but instead “specify a particular and unconventional method of assigning a user to a social punch card” (Appeal Br. 16)—but do not explain why these data analysis and manipulation functions are more than well-understood, routine, and conventional activities previously known in social media.

To the extent Appellants' arguments might be interpreted as invoking *DDR Holdings* (see Appeal Br. 15–18)—in that the instant claims improve the operation of a computer system—we disagree. In *DDR Holdings, LLC v. Hotels.com, L.P.*, 773 F.3d 1245 (Fed. Cir. 2014), the court held that a claim may amount to more than an abstract idea recited in the claims when it addresses and solves problems *only* encountered with computer technology and online transactions, e.g., by providing (serving) a composite web page rather than adhering to the routine, conventional functioning of Internet hyperlink protocol. See *DDR Holdings*, 773 F.3d at 1257–59. In contrast, claim 1 performs a process of collecting, analyzing and manipulating information, utilizing conventional computer networks and systems. See Spec. ¶¶ 60–62; Fig 1. As we previously explained, the instant claims are more akin to the claims for analyzing and manipulating information found to be abstract in *Electric Power Group*, 830 F.3d at 1353.

We agree with the Examiner that the additional limitations, separately, or as an ordered combination, do not provide meaningful limitations (i.e., do not add significantly more) to transform the abstract idea into a patent eligible application. See e.g., Final Act. 2–4; Ans. 5–6. Indeed, the claim merely recites collecting, analyzing, organizing, and manipulating information (data) similar to known punch cards using social media affinity measurements to associate users with punch cards. See Abstract; Spec. ¶¶ 1–7, 13–17; Fig. 1. Such steps are all routine and conventional and well-understood computer functions of a general processor. The Specification supports this view in discussing the processes implemented in software which operates on generic computers to perform the recited data manipulation steps. See Spec. ¶¶ 60–62. Such conventional computer

processes “do not alone transform an otherwise abstract idea into patent-eligible subject matter.” *FairWarning IP*, 839 F.3d at 1096 (citing *DDR Holdings*, 773 F.3d at 1256). In addition, Appellants’ own arguments (*see* Appeal Br. 6–7 (discussing US 12/978,265)) support that social media affinity measurements are known and well-understood:

Since a measure of affinity can reflect a user’s interest in “other users, content, actions, advertisements, or any other objects in the social networking system,” the measure of affinity from U.S. Application No. 12/978,265 can be used as either the claimed affinity coefficients or the claimed affinity scores.

Appeal Br. 6.

For at least the reasons above, we are not persuaded of Examiner error in the rejection of claim 1 under 35 U.S.C. § 101. Thus, we sustain the Examiner’s rejection under § 101 of independent claims 1 and 12, and dependent claims 2–11, which were not argued separately.

The Enablement Rejection of Claims 1 and 12

The Examiner rejects claims 1 and 12 as failing to comply with the enablement requirement. *See* Final Act. 4–5; Ans. 3–4. Appellants contend that their Specification, as originally filed, supports the disputed claim language. *See* Appeal Br. 5–7; Reply Br. 2–5. For example, Appellants contend that the recited “affinity score” and “affinity coefficients” in claim 1 are described in the originally filed Specification. App. Br. 5–6 (citing, e.g., Spec. ¶¶ 28, 33, and 56).

Appellants also discuss at length US 12/978,265. *See* Appeal Br. 6–7; Reply Br. 4–5. It is unclear how US 12/978,265 is related to the present application. To the extent Appellants incorporate US 12/978,265 as

knowledge within the skill of one skilled in the art, we need not (and do not) address the disclosures of US 12/978,265.

We agree with Appellants. Appellants' Specification discusses the disputed language and its functionality. *See* Appeal Br. 5–7; Reply Br. 2–5. Accordingly, Appellants persuasively argue that the Specification describes, supports, and enables the disputed language. The Examiner, on the other hand, merely states “[i]t is unclear how the determinations are made” because “[n]o algorithm or formula is provided.” Final Act. 5. The Examiner appears to conflate § 112, first paragraph, enablement analysis with § 112, first paragraph, written description analysis. Therefore, the Examiner has not clearly articulated either a § 112, first paragraph, enablement rejection or a § 112, first paragraph, written description rejection. Consequently, we are constrained by the record before us to find that the Examiner erred in rejecting claims 1 and 12 as failing to comply with the enablement requirement. Accordingly, we reverse the Examiner's § 112, first paragraph, rejection of claims 1 and 12.

The Written Description Rejection of Claims 1–6 and 13–21

The Examiner rejects claims 1–12 as failing to comply with the written description requirement. *See* Ans. 2–3. Appellants contend that at least their Paragraph 33 of their Specification, as originally filed, supports the disputed claim language. *See* Reply Br. 5–7. The cited portion of the Specification describes “affinity,” “affinity scores” and “affinity coefficients” (Spec. ¶ 33). Appellants also reiterate the discussion of US 12/978,265. *See* Reply Br. 6–7.

We agree with Appellants. Appellants' Specification discusses the disputed language and generally describes how the values are calculated. *See* Reply Br. 5–7 (citing Spec. ¶ 33); *see* also Fig. 4. Accordingly, Appellants persuasively argue that the Specification describes and supports the disputed language.

Consequently, we are constrained by the record before us to find that the Examiner erred in rejecting claims 1–12 as failing to comply with the written description requirement. We reverse the Examiner's written description rejection of claims 1–12.

The 35 U.S.C. § 103 Rejections

The Examiner rejects independent claim 1 (and independent claim 12) as being obvious in view of Pacheco E Murta, Eldred, Joa, Clyne, and Chudnovsky. *See* Final Act. 5–11; Ans. 6–7.

Appellants contend that Pacheco E Murta, Eldred, Joa, Clyne, and Chudnovsky do not teach the disputed features of claim 1 (or claim 12). *See* Appeal Br. 18–21; Reply Br. 15–18. More specifically, Appellants contend that Clyne and Pacheco E Murta fail to teach or suggest the affinity features of claim 1—“determining an affinity coefficient of the identified subject user for each of the users associated with the social punch card” and “determining the numeric affinity score for the social punch card based on the determined affinity coefficients.” Appeal Br. 19 (quoting claim 1); *see* Appeal Br. 19–21; Reply Br. 15–18.

The Examiner relies on Clyne to teach “social distance,” which the Examiner equates with both affinity coefficients (the “[s]ocial distance to one user” (Final Act. 8)) and affinity score (the “[s]ocial distance between

multiple users” (Final Act. 8)). *See* Final Act. 8–9 (citing Clyne ¶¶ 84, 273, 290).

We disagree with the Examiner’s interpretation of claim 1, which fails to give weight to, or properly consider, the terminology recited in the claim. We find the Examiner-cited portions of Clyne, at best, generally describe an undefined “social distance” term (*see* Clyne ¶ 84) and incentives or benefits (rewards) (*see* Clyne ¶¶ 273, 290). Accordingly, we agree with Appellants that Clyne and Pacheco E Murta fail to teach or suggest the affinity features of claim 1. *See* Appeal Br. 19–21; Reply Br. 15–18.

Consequently, we are constrained by the record before us to find that the Examiner erred in finding Pacheco E Murta, Eldred, Joa, Clyne, and Chudnovsky teach the disputed features of Appellants’ claim 1. Independent claim 12 includes limitations of commensurate scope. Dependent claim 2 depends from and stands with independent claims 1. Accordingly, we do not sustain the Examiner’s obviousness rejection of claims 1, 2, and 12.

The Examiner rejects dependent claims 3–9 and 11 as obvious in view of Pacheco E Murta, Eldred, Joa, Clyne, and Chudnovsky in combination with Looney, Walker, or Wilens. *See* Final Act. 18–27. The Examiner does not suggest, and we do not find, that the additional references (Looney, Walker, or Wilens) cure the deficiencies of Pacheco E Murta and Clyne (*supra*). Therefore, we reverse the Examiner’s obviousness rejections of dependent claims 3–9 and 11, for the same reasons set forth with respect to claim 1 (*supra*).

CONCLUSIONS

Appellants have not shown that the Examiner erred in rejecting claims 1–12 under 35 U.S.C. § 101.

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Appellants have shown that the Examiner erred in rejecting claims 1 and 12 under 35 U.S.C. § 112, first paragraph (with respect to enablement).

Appellants have shown that the Examiner erred in rejecting claims 1–12 under 35 U.S.C. § 112, first paragraph (with respect to written description).

Appellants have shown that the Examiner erred in rejecting claims 1–9, 11, and 12 under 35 U.S.C. § 103(a).

DECISION

Because we have affirmed at least one ground of rejection with respect to each claim on appeal, the Examiner’s decision rejecting claims 1–12 is affirmed. *See* 37 C.F.R. § 41.50(a)(1).

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).

AFFIRMED