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BEFORE THE PATENT TRIAL AND APPEAL BOARD

Ex parte SACHIT KAMAT, CHRISTIAN POSSE, ANMOL BHASIN,
CHUN YU WONG, PARKER R. BARRILE, and YI ETHAN ZHANG

Appeal 2019-002362¹
Application 13/679,765²
Technology Center 3600

Before ERIC S. FRAHM, JOYCE CRAIG, and MATTHEW J. McNEILL,
Administrative Patent Judges.

FRAHM, *Administrative Patent Judge.*

¹ Throughout this Opinion, we refer to: (1) the Final Office Action mailed June 30, 2017 (“Final Act.”); (2) the Appeal Brief filed April 30, 2018 (“Appeal Br.”); (3) the Advisory Action mailed May 21, 2018 (“Advisory Act.”); (4) Amended Appeal Brief filed July 20, 2018 (“Claims Appendix”); (5) the Examiner’s Answer mailed Nov. 26, 2018 (“Ans.”); and the Reply Brief filed Jan. 28, 2019. Appellant’s Amended Appeal Brief corrected the claims appendix, and lacks page numbers. Accordingly, we refer to the 8 pages of the Amended Appeal Brief in the order they appear, *ad seriatim*.

² The Leahy-Smith America Invents Act (“AIA”), Pub. L. No. 112-29, 125 Stat. 284 (2011), amended (i) 35 U.S.C. § 103, e.g., to rename 35 U.S.C. § 103’s subsections; and (ii) 35 U.S.C. § 112, e.g., to rename the second paragraph of 35 U.S.C. § 112 from 35 U.S.C. § 112(2) to 35 U.S.C. § 112(b). The filing date of the present application is November 16, 2012, prior to the AIA’s effective date for applications (March 16, 2013). Accordingly, this Decision refers to the pre-AIA versions of 35 U.S.C. § 103 and 35 U.S.C. § 112, second paragraph, i.e., § 103(a) and § 112(2).

DECISION ON APPEAL
STATEMENT OF CASE

Introduction

Appellant³ appeals under 35 U.S.C. § 134(a) from a final rejection of claims 1, 3–7, 9–13, 15–19, 21–25, and 27–31. Claims 2, 8, 14, 20, and 26 have been canceled. *See* Final Act. 2. We have jurisdiction under 35 U.S.C. § 6(b).

We affirm.

Appellant’s Disclosed and Claimed Invention

Appellant’s disclosed invention “generally relates to the presentation of sponsored job messages to users of a social network based on a job profile and user characteristics” (Spec. ¶ 1). After scoring results for relevance of job and user characteristics, job information is displayed to users of a social network on a user interface (*see e.g.*, Fig. 10, video display 1010) in the form of a message (Spec. ¶ 15; claim 1; Abstract). Appellant has developed a system and method

that displays job postings to users of a social network based on characteristics, such as the user's social network profile, the user's behavior or activities, and the user's social graph, such as people, companies, and groups that the user has connected with, follows, or joins within the social network. In this way, a user may seamlessly receive pertinent job postings based on their prior social network activity. Relatedly, job posting entities may sponsor job postings on the social network or on a

³ We use the word “Appellant” to refer to “applicant” as defined in 37 C.F.R. § 1.42. “The word ‘applicant’ when used in this title refers to the inventor or all of the joint inventors, or to the person applying for a patent as provided in §§ 1.43, 1.45, or 1.46.” 37 C.F.R. § 1.42(a). Appellant identifies the real party in interest as Microsoft Technology Licensing, LLC. Appeal Br. 2.

platform with access to the user's social network characteristics with the increased expectation that the expense of sponsoring a job posting may be relatively more likely to result in the job posting being presented to a user with suitable characteristics.

Spec. ¶ 15.

Exemplary Claim

Exemplary claim 1 under appeal, with bracketed lettering/numbering and formatting added, and emphases added to key portions of the claim at issue, reads as follows:

1. *A non-transitory memory device*, the memory device communicatively coupled to *a processor* and comprising instructions which, when performed on the processor, cause the processor to perform operations comprising:

[A] *receive a user characteristic* of a user of an online social networking system;

[B] *receive a job characteristic* of a job profile of each of a plurality of jobs posted to the online social networking system;

[C] for at least some of the plurality of jobs, *receive a job bid* from an entity posting an associated one of the plurality of jobs to the online social networking system;

[D] for each of the plurality of jobs, *determine a relevance score* based on [1] the job characteristic and [2] the user characteristic;

[E] for each of the plurality of jobs, *determine an aggregate job score* for the user based on [1] the relevance score and [2] the job bid; and

[F] *cause a user interface to present a message* related to at least some of the plurality of jobs to the user based, at least in part, on:

[1] the respective aggregate job score of each of the plurality of jobs; and

[2] the respective relevance score having a magnitude greater than a predetermined threshold.

Claims Appendix, p. 2 (emphases, formatting, and bracketed lettering/numbering added).

The Examiner's Rejections

(1) Claims 1, 3–7, 9–13, 15–19, 21–25, and 27–31 stand rejected under 35 U.S.C. § 101 as being directed to patent-ineligible subject matter (an abstract idea), without significantly more. Final Act. 2–4; Ans. 3–10.

(2) The Examiner rejected claims 1, 3–7, 9–13, 15–19, 21–25, and 27–31 as being indefinite under 35 U.S.C. § 112(2). Final Act. 4. This rejection has been withdrawn by the Examiner (Ans. 3; *see also* Advisory Act. 1, box 4), and is, therefore, not before us on appeal. Accordingly, we will not address this rejection further.

(3) Claims 1, 3–7, 9–13, 15–19, 21–25, and 27–31 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Novack (US 2009/0299993 A1; published Dec. 3, 2009) and Yahia et al. (US 2008/0114672 A1; published May 15, 2008) (hereinafter, “Yahia”). Final Act. 5–11.

Appellant's Contentions

(1) With regard to the patent eligibility rejection, Appellant primarily makes arguments regarding claim 1, and generally contends the claims are not directed to an abstract idea, but to improvements in the relevant technology (*see* Appeal Br. 9–20), e.g., the generation of user interfaces (*see* Appeal Br. 17), “an improvement to computer functionality” (Appeal Br. 17).

Appellant makes only nominal arguments to dependent claims 3, 4, and 7, simply repeating what claims 3, 4, and 7 recite, and contending the specific operations for determining the scores of these claims “are directed

to patentable subject matter” (*see* Appeal Br. 17). Such conclusions are not considered a separate argument for patent eligibility. *See e.g.*, 37 C.F.R. § 41.37(c)(1)(iv)(last sentence) (“A statement which merely points out what a claim recites will not be considered an argument for separate patentability of the claim.”); *In re Lovin*, 652 F.3d 1349, 1357 (Fed. Cir. 2011) (stating that interpreting 37 C.F.R. § 41.37(c)(1) to require a more substantive argument than a naked assertion that the prior art fails to teach limitation in order to address a claim separately, is not an unreasonable interpretation of the rule); *Ex parte Belinne*, 2009 WL 2477843 at *4 (BPAI 2009) (informative) (“Appellants’ argument . . . repeatedly restates elements of the claim language and simply argues that the elements are missing from the reference. However, Appellants do not present any arguments to explain why the Examiner’s explicit fact finding is in error.”). Additionally, any arguments not presented are waived. *See Ex parte Borden*, 93 USPQ2d 1473, 1474 (BPAI 2010) (informative).

Therefore, based on Appellant’s patent eligibility arguments, and because claims 1, 3–7, 9–13, 15–19, 21–25, and 27–31 contain commensurate limitations, we select claim 1 as representative of claims 1, 3–7, 9–13, 15–19, 21–25, and 27–31 rejected under 35 U.S.C. § 101 for patent-ineligibility.

(2) With regard to the obviousness rejections of claims 1, 3–7, 9–13, 15–19, 21–25, and 27–31, Appellant primarily argues the merits of independent claim 1 (*see* Appeal Br. 23–28), and makes similar arguments as to the patentability of remaining independent claims 13 and 25, as well as dependent claims 5, 6, 9–12, 17–19, 21–24, 29, and 30. *See* Appeal Br. 28. As to independent claim 1, Appellant contends (Appeal Br. 24–28) that the

Examiner erred in rejecting claim 1 under 35 U.S.C. § 103, because Novack and Yahia, whether taken individually or in combination, fail to teach or suggest limitations D–F recited in claim 1.

Based on Appellant’s obviousness arguments, and because claims 1, 5, 6, 9–12, 17, 18, 21–24, 29, and 30 contain commensurate limitations, we select claim 1 as representative of claims 1, 5, 6, 9–12, 17, 18, 21–24, 29, and 30 rejected under 35 U.S.C. § 103(a) for obviousness over the base combination of Novack and Yahia.

(3) With regard to the obviousness rejection of dependent claims 3, 4, 7, 15, 16, 19, 27, 28, and 31, Appellant (a) relies on the arguments presented as to claims 1, 13, and 25 from which these claims ultimately depend; and (b) presents separate arguments as to claims 3, 4, and 7. *See* Appeal Br. 28–29.

Based on Appellant’s arguments regarding claims 3, 4, 7, 15, 16, 19, 27, 28, and 31, and because these claims fall into three groups of claims having commensurate limitations (e.g., claims reciting combining, multiplying, and using percentages), we select (i) claim 3 as representative of claims 3, 15, and 27 (reciting “combining”); (ii) claim 4 as representative of claims 4, 16, and 28 (reciting “multiplying”); and (iii) claim 7 as representative of claims 7, 19, and 31 (reciting using “percentage”), all rejected under 35 U.S.C. § 103(a) for obviousness over the combination of Novack and Yahia.

Principal Issues on Appeal

Based on Appellant’s arguments in the Appeal Brief (Appeal Br. 9–30) and the Reply Brief (Reply Br. 2–7), the following issues are presented on appeal:

(1) Has Appellant shown the Examiner erred in rejecting representative claim 1, as well as 3–7, 9–13, 15–19, 21–25, and 27–31 grouped therewith, under 35 U.S.C. § 101 as being directed to patent-ineligible subject matter (i.e., a judicial exception such as an abstract idea), without significantly more)?

(2) Did the Examiner err in rejecting claims 1, 5, 6, 9–12, 17, 18, 21–24, 29, and 30 under 35 U.S.C. § 103(a) as being unpatentable over the combination of Novack and Yahia because the combination fails to teach or suggest limitations D–F recited in representative claim 1?

(3) Did the Examiner err in rejecting claims 3, 15, and 27 under 35 U.S.C. § 103(a) as being unpatentable over the combination of Novack and Yahia because the combination fails to teach or suggest the disputed “combining” limitation recited in representative claim 3?

(4) Did the Examiner err in rejecting claims 4, 16, and 28 under 35 U.S.C. § 103(a) as being unpatentable over the combination of Novack and Yahia because the combination fails to teach or suggest the disputed “multiplying” limitation recited in representative claim 4?

(5) Did the Examiner err in rejecting claims 7, 19, and 31 under 35 U.S.C. § 103(a) as being unpatentable over the combination of Novack and Yahia because the combination fails to teach or suggest the disputed “percentage” limitation recited in representative claim 7?

ANALYSIS

Patent Eligibility Under 35 U.S.C. § 101

Section 101 of the Patent Act provides “[w]hoever invents or discovers any new and useful process, machine, manufacture, or

composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.” 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. *E.g.*, *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)). In accordance with that framework, we first determine what concept the claim is “directed to.” *See Alice*, 573 U.S. at 219 (“On their face, the claims before us are drawn to the concept of intermediated settlement, *i.e.*, the use of a third party to mitigate settlement risk.”); *see also Bilski v. Kappos*, 561 U.S. 593, 611 (2010) (“Claims 1 and 4 in petitioners’ application explain the basic concept of hedging, or protecting against risk.”).

Concepts determined to be abstract ideas, and, thus, patent ineligible, include certain methods of organizing human activity, such as fundamental economic practices (*Alice*, 573 U.S. at 219–20; *Bilski*, 561 U.S. at 611); mathematical formulas (*Parker v. Flook*, 437 U.S. 584, 594–95 (1978)); and mental processes (*Gottschalk v. Benson*, 409 U.S. 63, 67 (1972)). Concepts determined to be patent eligible include physical and chemical processes, such as “molding rubber products” (*Diamond v. Diehr*, 450 U.S. 175, 191 (1981)); “tanning, dyeing, making water-proof cloth, vulcanizing India rubber, smelting ores” (*id.* at 182 n.7 (quoting *Corning v. Burden*, 56 U.S.

(15 How.) 252, 267–68 (1854)); and manufacturing flour (*Benson*, 409 U.S. at 69 (citing *Cochrane v. Deener*, 94 U.S. 780, 785 (1876))).

In *Diehr*, the claim at issue recited a mathematical formula, but the Supreme Court held that “[a] claim drawn to subject matter otherwise statutory does not become nonstatutory simply because it uses a mathematical formula.” *Diehr*, 450 U.S. at 176; *see also id.* at 191 (“We view respondents’ claims as nothing more than a process for molding rubber products and not as an attempt to patent a mathematical formula.”). 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 (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.* (alterations in original) (quoting *Mayo*, 566 U.S. at 77). “[M]erely requir[ing] generic computer implementation[] fail[s] to transform that abstract idea into a patent-eligible invention.” *Id.*

The PTO published revised guidance on the application of § 101. USPTO, *2019 Revised Patent Subject Matter Eligibility Guidance*, 84 Fed. Reg. 50 (Jan. 7, 2019) (“Guidance”).⁴ Under the 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) (“Step 2A, Prong 1”); and
- (2) additional elements that integrate the judicial exception into a practical application (*see* MANUAL OF PATENT EXAMINING PROCEDURE (“MPEP”) §§ 2106.05(a)–(c), (e)–(h)) (9th Ed., Rev. 08.2017, 2018) (“Step 2A, Prong 2”).⁵

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

- (3) adds a specific limitation beyond the judicial exception that is not “well-understood, routine, 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 Guidance, 84 Fed. Reg. at 54–56.

⁴ In response to received public comments, the Office issued further guidance on October 17, 2019, updating and clarifying the Guidance. USPTO, *October 2019 Update: Subject Matter Eligibility* (the “October 2019 Update”) (available at https://www.uspto.gov/sites/default/files/documents/peg_oct_2019_update.pdf).

⁵ This evaluation is performed by (a) identifying whether there are any additional elements recited in the claim beyond the judicial exception, and (b) evaluating those additional elements individually and in combination to determine whether the claim as a whole integrates the exception into a practical application. *See* Guidance - Section III(A)(2), 84 Fed. Reg. 54–55.

Even if the claim recites an abstract idea, the Federal Circuit explains the “directed to” inquiry is not simply asking whether the claims involve a patent-ineligible concept:

The “directed to” inquiry . . . cannot simply ask whether the claims *involve* a patent-ineligible concept, because essentially every routinely patent-eligible claim involving physical products and actions *involves* a law of nature and/or natural phenomenon—after all, they take place in the physical world. *See Mayo*, 132 S.Ct. at 1293 (“For all inventions at some level embody, use, reflect, rest upon, or apply laws of nature, natural phenomena, or abstract ideas.”) Rather, the “directed to” inquiry applies a stage-one filter to claims, considered in light of the specification, based on whether “their character as a whole is directed to excluded subject matter.”

Enfish, LLC v. Microsoft Corp., 822 F.3d 1327, 1335 (Fed. Cir. 2016); *see also Diehr*, 450 U.S. at 188 (“In determining the eligibility of respondents’ claimed process for patent protection under § 101, their claims must be considered as a whole.”); *McRO, Inc. v. Bandai Namco Games Am. Inc.*, 837 F.3d 1299, 1314 (Fed. Cir. 2016) (the question is whether the claims as a whole “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”).

Step 1

Under Step 1 of the patent-eligibility inquiry under § 101, we determine whether a claim is directed to one of the four statutory categories of invention, i.e., a process, machine, manufacture, or composition of matter.

In the instant case on appeal, representative claim 1 recites “[a] non-transitory memory device” which is “coupled to a processor” for presenting a message on a “user interface” (claim 1). Therefore, claim 1, as an apparatus claim, recites at least one of the enumerated categories (e.g.,

machine or manufacture) of eligible subject matter in 35 U.S.C. § 101. Accordingly, we agree with Appellant (*see* Reply Br. 2) that claim 1 is directed to a statutory category.

As a result, as to claim 1, as well as claims 3–7, 9–13, 15–19, 21–25, and 27–31 grouped therewith, we continue our analysis under Step 2A, Prong 1 of the Guidance to determine whether claim 1 recites a judicial exception (a law of nature, natural phenomenon, or subject matter within the enumerated groupings of abstract ideas above).

Step 2A, Prong 1

Although claim 1 nominally recites a “memory device” connected to “a processor” (*see* claim 1, preamble) and “an online social networking system” (*see* claim 1, limitation A), and presents output messages on “a user interface” (*see* claim 1, limitation F), the focus of claim 1 is on performing the steps of a mental processes (*see* *Gottschalk v. Benson*, 409 U.S. 63, 67 (1972), including steps A through F set forth in the body of claim 1. As such, the claimed invention recites a mental process, which is an abstract idea. *See, e.g., Synopsys, Inc. v. Mentor Graphics Corp.*, 839 F.3d 1138, 1146 (Fed. Cir. 2016) (“analyzing information by steps people [can] go through in their minds, or by mathematical algorithms, without more [are] mental processes within the abstract-idea category.”); *Clarilogic v. Formfree Holdings*, 681 F. App’x. 950, 954–55 (Fed. Cir. 2017) (gathering, analyzing, and outputting financial data/assessment is an abstract idea that is patent ineligible); *Intellectual Ventures I LLC v. Capital One Bank (USA)*, 792 F.3d 1363, 1369 (Fed. Cir. 2015) (targeted marketing is a form of “tailoring information based on [provided] data,” which has been previously held by the Federal Circuit to be an abstract idea, and a concept that is a

“fundamental practice” that dates back to newspaper advertisements); *Morsa v. Facebook, Inc.*, 77 F. Supp. 3d 1007, 1014 (C.D. Cal. 2014) (finding that both “targeting advertisements to certain consumers, and using a bidding system to determine when and how advertisements will be displayed” are abstract ideas), *aff’d per curiam*, 622 F. App’x 915 (Fed. Cir. 2015); *Ultramercial, Inc. v. Hulu, LLC*, 772 F.3d 709, 714 (Fed. Cir. 2014) (determining that using an advertisement as an exchange or currency is an abstract idea).

At a high level, representative claim 1 recites a memory and processor (i.e., a computer; *see* Fig. 10) for performing the method of presenting sponsored job messages to users of a social network based on job and user characteristics (*see* claim 1; Spec. ¶ 1), where after scoring results for the relevance of the job and user characteristics, job information is displayed to users of a social network on a user interface (Fig. 10, video display 1010) in the form of a message (*see* claim 1; Spec. ¶ 15; claim 1; Abstract). The Examiner determines, and we agree, that claim 1 is

directed to comparing received user characteristics, received job characteristics and received bids to determine scores which represent the abstract ideas of “concepts relating to interpersonal and intrapersonal activities, such as managing relationships or transactions between people, social activities, and human behavior”, “collecting and comparing known information”, and “comparing new and stored information and using rules to identify portions”.

Final Act. 2.

We agree with the Examiner (*see* Final Act. 2; Ans. 4–5) that claim 1 sets forth a mental process. *See Gottschalk v. Benson*, 409 U.S. 63, 67 (1972). And, we agree with the Examiner (*see* Final Act. 2; Ans. 4) that the

comparing of job and user characteristics and determination of relevance set forth in claim 1 represent abstract ideas such as managing relationships and transactions between people (i.e., the organization of human activity such as targeted advertising and/or job recruiting). Claim 1 recites not only a mental process, but also the organization of human activity, such as business relations between people (e.g., collecting job and user characteristics and scoring results for the relevance of the job and user characteristics).

Thus, we also agree with the Examiner that in the process of claim 1, “pre-internet concepts (comparing a person's data to job requirements, producing scores to show matches, etc.) are performed on the internet without any significant changes to the processing” (Ans. 9). Notably, Appellant’s Specification describes that portions of the job recruiting process (recited in claim 1) can be performed manually by a job recruiter:

The *job recruiter can identify users* who have user characteristics that are desirable for recruiting *and manually select users* of the social network to whom a message relating to the job can or should be presented.

Spec. ¶ 23 (emphases added).

Finally, we agree with the Examiner that the online social networking system set for in claim 1 (*see* claim 1, limitation A) is only used as a tool (to collect necessary information) for performing certain activities of the recited process (*see* Ans. 9). *See Synopsys*, 839 F.3d at 1146 (“While the Supreme Court has altered the § 101 analysis since *CyberSource* in cases like *Mayo* and *Alice*, we continue to ‘treat[] analyzing information by steps people go through in their minds, or by mathematical algorithms, without more, as essentially mental processes within the abstract-idea category.’”) (quoting *Elec. Power*, 830 F.3d at 1354); *see also 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.*”); *Benson*, 409 U.S. at 67.

Our reviewing court has also 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, Nat’l Ass’n*, 776 F.3d 1343, 1347 (Fed. Cir. 2014); *see also Smart Sys. Innovations, LLC v. Chicago Transit Auth.*, 873 F.3d 1364, 1372 (Fed. Cir. 2017) (concluding “claims directed to the collection, storage, and recognition of data are directed to an abstract idea”). Moreover, our reviewing court has concluded that acts of parsing, comparing, storing, and editing data are abstract ideas. *Berkheimer v. HP Inc.*, 881 F.3d 1360, 1366 (Fed. Cir. 2018). In addition, the collection of information and analysis of information (e.g., recognizing certain data within the dataset) are also abstract ideas. *Elec. Power Grp., LLC v. Alstom S.A.*, 830 F.3d 1350, 1353 (Fed. Cir. 2016). 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); *see also SAP Am., Inc. v. InvestPic, LLC*, 898 F.3d 1161, 1167 (Fed. Cir. 2018) (“merely presenting the results of abstract processes of collecting and analyzing information . . . is abstract as an ancillary part of such collection and analysis”) (quotations omitted).

In addition, our reviewing court has held that combining several abstract ideas (e.g., like a mental process and a fundamental economic activity as here) does not render the combination any less abstract.

RecogniCorp, LLC v. Nintendo Co., 855 F.3d 1322, 1327 (Fed. Cir. 2017) (“Adding one abstract idea . . . to another abstract idea . . . does not render the claim non-abstract.”); *see also FairWarning IP, LLC v. Iatric Sys., Inc.*, 839 F.3d 1089, 1093–94 (Fed. Cir. 2016) (patent-ineligible claims were directed to a combination of abstract ideas).

Because we conclude claim 1 *recites* an abstract idea and/or combination of abstract ideas, we proceed to Step 2A, Prong 2 of the Guidance to determine whether claim 1 is “directed to” the judicial exception, by determining whether additional elements of the claim integrate the abstract idea into a practical application. Such additional elements *may* reflect an improvement to a technology or technical field. *See* Guidance, 84 Fed. Reg. at 55.

Step 2A, Prong 2 – Practical Application

Under Step 2A, Prong 2, we determine whether the recited judicial exception is integrated into a practical application of that exception. If the recited judicial exception is integrated into a practical application, the claim is not directed to the judicial exception.

But for the recitation of a generic “user interface” for presenting job messages to a user (claim 1), we find the recited steps or acts, could be performed as mental steps, or with the aid of pen and paper. *See Synopsys*, 839 F.3d at 1146 (“While the Supreme Court has altered the § 101 analysis since *CyberSource* in cases like *Mayo* and *Alice*, we continue to ‘treat[] analyzing information by steps people go through in their minds, or by mathematical algorithms, without more, as essentially mental processes within the abstract-idea category.’”) (quoting *Elec. Power*, 830 F.3d at 1354); *see also 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*.”).

“[M]erely selecting information, by content or source, for collection [and] analysis . . . does nothing significant to differentiate a process from ordinary mental processes.” *Elec. Power*, 830 F.3d at 1355. Receiving and analyzing (or identifying data), by itself, does not transform an otherwise-abstract process or system of information collection and analysis. *See id.* Like the claims at issue in *Electric Power*, we find Appellant’s claim 1 does not invoke “any assertedly inventive programming” or an “arguably inventive set of components or methods.” *Id.*

Appellant contends that claim 1 is not directed to an abstract idea, but to “an improvement to computer functionality, i.e., the generation of a user interface that improves [the] efficiency based on the targeting feature generated by the aggregate job score” (Appeal Br. 17). Thus, Appellant’s invention improves efficiency and accuracy of posting jobs befitting a user, based on the relevancies of the job and user characteristics, and not the speed or efficiency of the memory, processor, and/or user interface (i.e., the computer).

We disagree with Appellant that the focus of claim 1 is on a technical improvement (or practical application of the abstract idea). *See* Appeal Br. 11; Reply Br. 2. More specifically, we disagree with Appellant that claim 1 is not directed to a judicial exception because “[t]he claims do not recite a mental process, because the claims are all directed to computing instructions tied to a specific computer component and operating within the context of an online social networking system” (Reply Br. 2).

As noted in our discussion of Step 2A, Prong 1 above, we agree with the Examiner that the online social networking system set forth in claim 1 (*see* claim 1, limitation A) is only used as a tool for performing certain activities of the recited process (to collect necessary information) (*see* Ans. 9). The online social networking system recited in limitation A of claim 1 only serves to provide data needed for analysis, here, user characteristics.

We also disagree with Appellant that “[t]he claims are not practically performed by the human mind, as a human mind cannot access and receive information from a plurality of jobs posted to the online social networking system” (Reply Br. 2). This is contradicted by Appellant’s Specification, which states that “[t]he *job recruiter* can *identify* users who have user characteristics that are desirable for recruiting and *manually select* users of the social network to whom a message relating to the job can or should be presented” (Spec. ¶ 23) (emphases added).

Therefore, as noted in our discussion of Step 2A, Prong 1 above, we agree with the Examiner that in the process of claim 1, “pre-internet concepts (comparing a person's data to job requirements, producing scores to show matches, etc.) are performed on the internet without any significant changes to the processing” (Ans. 9).

The mere recitation of identifying and presenting information in claim 1 does not embody an improvement in computer capabilities as in *Enfish*. *See* 822 F.3d at 1336 (“[T]he plain focus of the claims is on an improvement to computer functionality itself, not on economic or other tasks for which a computer is used in its ordinary capacity.”). Rather, the focus of claim 1 is on facilitating the job recruiting and advertisement process, i.e., determining which jobs to present to users based on relevancy and matching of job and

user characteristics. This is an improvement to help the *user*, but not the *computer itself* (or in the case of claim 1, the user interface and/or processor and memory). Claim 1 does not recite a method of posting targeted, relevant, matching jobs to users that improves the speed or efficiency of the memory device and/or processor, reduces memory requirements, or otherwise improves a user interface.

To the extent that Appellant would argue the claimed method to perform targeted job posting faster than other computerized scheduling methods, that would not provide an improvement to the computer itself. *See, e.g., Versata Dev. Grp., Inc. v. SAP Am., Inc.*, 793 F.3d 1306, 1335 (Fed. Cir. 2015) (explaining that in order for a machine to add significantly more, it must “play a significant part in permitting the claimed method to be performed, rather than function solely as an obvious mechanism for permitting a solution to be achieved more **quickly**”) (emphasis added); *FairWarning IP, LLC v. Iatric Sys., Inc.*, 839 F.3d 1089, 1095 (2016) (“While the claimed system and method certainly purport to accelerate the process of analyzing audit log data, the speed increase comes from the capabilities of a general-purpose computer, rather than the patented method itself”); *Bancorp Servs., L.L.C. v. Sun Life Assurance Co. of Can. (U.S.)*, 687 F.3d 1266, 1278 (Fed. Cir. 2012) (“[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”).

The claimed invention (*see* claim 1) identifies data (e.g., user and job characteristics in limitations A and B, job bids in limitation C); analyzes data (e.g., determining a relevance score in limitation D, and determining an aggregate job score in limitation E); and then presents data (e.g., post-

solution activity, such as presenting a job message on a user interface in limitation F). Thus, the steps of (i) limitations A through E are merely conventional data gathering and analysis (*see* MPEP § 2106.05(g); *OIP Techs., Inc. v. Amazon.com, Inc.*, 788 F.3d 1359, 1363 (Fed. Cir. 2015); *Elec. Power*, 830 F.3d at 1354); and (ii) limitation F is insignificant extra-solution activity that does not meaningfully limit the claim (*see* MPEP § 2106.05(g)). As such, based on the record before us, we determine that the claimed invention is not integrated into a practical application.

Merely adding a programmed computer to perform generic computer functions does not automatically overcome an eligibility rejection. *Alice*, 573 U.S. at 223–24. Furthermore, the use of a general purpose computer to apply an otherwise ineligible algorithm does not qualify as a particular machine. *See Ultramercial*, 772 F.3d at 716–17; *In re TLI Commc'ns LLC v. AV Automotive, LLC*, 823 F.3d 607, 613 (Fed. Cir. 2016) (mere recitation of concrete or tangible components is not an inventive concept); *Eon Corp. IP Holdings LLC v. AT&T Mobility LLC*, 785 F.3d 616, 623 (Fed. Cir. 2015) (noting that *Alappat*'s rationale that an otherwise ineligible algorithm or software could be made patent-eligible by merely adding a generic computer to the claim was superseded by the Supreme Court's *Bilski* and *Alice* decisions). In the instant case, using a computer to more quickly facilitate matching jobs to user characteristics and facilitate job bidding is nothing more than the abstract idea itself (i.e., posting relevant jobs to users which is a fundamental economic practice and mental process).

For the reasons discussed above, we conclude Appellant's claim 1 (and claims 3–7, 9–13, 15–19, 21–25, and 27–31 grouped therewith) invokes generic computer components (a “memory device,” “processor,” and “user

interface”) merely as a tool in which the computer instructions apply the judicial exception and, thus, the abstract idea is not integrated into a practical application. Because Appellant has not persuaded us the Examiner’s determination that claim 1 recites an abstract idea under Step 2A is in error, and claim 1 recites a judicial exception (i.e., the abstract idea of a method of organizing human activity and/or mental process) that is not integrated into a practical application, in accordance with the Guidance, we conclude claim 1 and claims 3–7, 9–13, 15–19, 21–25, and 27–31 grouped therewith, are directed to an abstract idea under Step 2A, and the eligibility analysis with regard to claims 1, 3–7, 9–13, 15–19, 21–25, and 27–31 proceeds to Step 2B.

Step 2B – Inventive Concept

Having determined claim 1 and claims 3–7, 9–13, 15–19, 21–25, and 27–31 grouped therewith are directed to an abstract idea that is not integrated into a practical application, we now evaluate whether the additional elements, whether examined alone or as an ordered combination, add a specific limitation that is not well-understood, routine, or conventional activity in the field, or simply append well-understood, routine, conventional activities previously known to the industry, specified at a high level of generality, to the abstract idea. *See generally* Guidance.

Here, claim 1 recites the additional elements of “a user interface,” a “memory device,” and “a processor” (claim 1). Considering claim 1 as a whole, none of the additional elements applies or uses the abstract idea in a meaningful way such that the claim as a whole is more than a drafting effort designed to monopolize the exception.

Appellant’s contention that claim 1 “operate[s] within the context of an online social networking system” (Reply Br. 2), is not persuasive. As discussed above, the social networking system recited in limitation A of claim 1 is extra-solution activity, e.g., data gathering. Appellant has not identified what it is about claim 1 (or any other claims) that allegedly amounts to more than a conventional arrangement of limitations for performing the abstract idea identified above. In other words, Appellant does not persuasively argue any specific limitation or combination thereof is not well-understood, routine, or conventional in the field. In particular, Appellant’s attorney arguments that the subject matter in claim 1 is an improvement to computer functionality like the generation of user interfaces, because the user interface of claim 1 “improves efficiency based on the targeting feature generated by the aggregate job score” (Appeal Br. 17), are unpersuasive, because they are not supported by competent evidence. *See In re Geisler*, 116 F.3d 1465, 1470 (Fed. Cir. 1997); *Meitzner v. Mindick*, 549 F.2d 775, 782 (Fed. Cir. 1977). In addition, Appellant’s argument (*see* Appeal Br. 17; Reply Br. 2) is, in essence, a conclusory assertion that the claims are non-conventional, and thus a technological improvement.

The Examiner determines, and we agree, that the only elements beyond the abstract idea are *generic* computer components used to perform *generic* computer functions (Final Act. 3–4; Ans. 7–9) — a determination that is supported by Appellant’s Figures 1 through 4 and 10 and the accompanying descriptions found in the Specification (*see* Spec. ¶¶ 16, 25, 31, 44, 90–93). Appellant’s Specification only shows (*see* Figs. 1–4, 10) and describes (*see e.g.*, Spec. ¶¶ 16, 25, 31, 44, 90–93) well-understood, routine, conventional computer components used for facilitating event

scheduling (e.g., a computer, processor, memory, user interface, and engines/modules) that are in a general purpose computing environment in a manner that indicates the components and the functions they perform were well-known in the art. *See Hybritech Inc. v. Monoclonal Antibodies, Inc.*, 802 F.2d 1367, 1384 (Fed. Cir. 1986) (explaining that “a patent need not teach, and preferably omits, what is well known in the art”); *see also* USPTO, Memorandum on Changes in Examination Procedure Pertaining to Subject Matter Eligibility, Recent Subject Matter Eligibility Decision (*Berkheimer v. HP, Inc.*) at 3 (Apr. 19, 2018), available at <https://www.uspto.gov/sites/default/files/documents/memo-berkheimer-20180419.PDF> (explaining that a specification that describes additional elements “in a manner that indicates that the additional elements are sufficiently well-known that the specification does not need to describe the particulars of such additional elements to satisfy 35 U.S.C. § 112(a)” can show that the elements are well understood, routine, and conventional); *Intellectual Ventures I LLC v. Erie Indem. Co.*, 850 F.3d 1315, 1331 (Fed. Cir. 2017) (“The claimed mobile interface is so lacking in implementation details that it amounts to merely a generic component (software, hardware, or firmware) that permits the performance of the abstract idea, i.e., to retrieve the user-specific resources.”).

In particular, we agree with the Examiner (*see* Ans. 7–9) that the activities performed in the steps of claim 1 are disclosed by Appellant to be performed by generic general-purpose computer components. Specifically, Appellant’s Specification states:

User devices 102 can be a personal computer, netbook, electronic notebook, smartphone, *or any electronic device known in the art* that is configured to display web pages.

Spec. ¶ 16 (emphasis added).

Appellant describes the processor components used to perform the claimed invention as being “achieved with a general recommendation engine” (Spec. ¶ 25) consisting of a characteristic extraction engine 300 and a matching engine 302 (*see* Spec. ¶¶ 26, 41), and operating in combination with generic interfaces to a social network server 104 such as a webserver 202 having standard functionality (*see* Spec. ¶¶ 30, 31, 43, 44). The memory 1004, processor 1002, and user interface 1010 are described in generic terms (*see* Spec. ¶¶ 90–93), for example:

The machine 1000 includes a processor 1002 (e.g., a central processing unit (CPU), a graphics processing unit (GPU), a digital signal processor (DSP), an application specific integrated circuit (ASIC), a radio-frequency integrated circuit (RFIC), or any suitable combination thereof), a main memory 1004, and a static memory 1006, which are configured to communicate with each other via a bus 1008. The machine 1000 may further include a graphics display 1010 (e.g., a plasma display panel (PDP), a light emitting diode (LED) display, a liquid crystal display (LCD), a projector, or a cathode ray tube (CRT)). The machine 1000 may also include an alphanumeric input device 1012 (e.g., a keyboard), a cursor control device 1014 (e.g., a mouse, a touchpad, a trackball, a joystick, a motion sensor, or other pointing instrument), a storage unit 1016, a signal generation device 1018 (e.g., a speaker), and a network interface device 1020.

Spec. ¶ 91. Further, Appellant describes the job user interface 402 in generic terms:

The server 104 can include a job poster interface 402, such as with a user interface coupled to the server 104 or via the network interface 106. *The user interface can include a*

conventional keyboard and display configuration well known in the art.

Spec. ¶ 44 (emphasis added). And,

The job poster interface 402 is coupled to a data management system 404. The data management system 404 can incorporate data management technologies *well known in the art* or can incorporate proprietary data management structures.

Spec. ¶ 45 (emphasis added).

As a result, we are not persuaded that the targeted job recruiting and posting operations recited in claim 1 are anything beyond generic computer functions as opposed to an improvement to a fundamental economic practice and/or method of organizing human activity. Considering the elements of claim 1 individually and as an ordered combination, claim 1 does no more than simply instruct the practitioner to implement the abstract idea on a generic computer, processor, and/or user interface. *Dealertrack, Inc. v. Huber*, 674 F.3d 1315, 1333–34 (Fed. Cir. 2012) (“Simply adding a ‘computer aided’ limitation to a claim covering an abstract concept, without more, is insufficient to render [a] claim patent eligible.”)

Additionally, as noted in MPEP § 2106.05(d)(II), the courts have previously recognized that using computer processors and memories to collect data and keep records, perform repetitive calculations, and/or receive/send data are well-understood, routine, and conventional functions when they are claimed in a merely generic manner (e.g., at a high level of generality) or as insignificant extra-solution activity (*see* MPEP § 2106.05(d)(II)(i)–(iv)). *See also Berkheimer*, 881 F.3d at 1366 (acts of parsing, comparing, storing, and editing data are abstract ideas); *SAP Am., Inc. v. Investpic, LLC*, 890 F.3d 1016, 1021 (Fed. Cir. 2018) (“merely

presenting the results of abstract processes of collecting and analyzing information . . . is abstract as an ancillary part of such collection and analysis”); *Intellectual Ventures I*, 850 F.3d at 1340 (“collecting, displaying, and manipulating data” is an abstract idea); *Smart Sys.*, 873 F.3d at 1372 (concluding “claims directed to the collection, storage, and recognition of data are directed to an abstract idea.”).

As a result, Appellant has not persuaded us the Examiner erred with respect to the Guidance’s Step 2B analysis. *See* Guidance, 84 Fed. Reg. at Step 2B.

In view of the foregoing, Appellant has not sufficiently shown the Examiner erred in determining claims 1, 3–7, 9–13, 15–19, 21–25, and 27–31 are directed to patent-ineligible subject matter (an abstract idea), without significantly more.

Obviousness Under 35 U.S.C. § 103(a)

We have reviewed the Examiner’s obviousness rejections of claims 1, 3–7, 9–13, 15–19, 21–25, and 27–31 (Final Act. 5–11) and response to Appellant’s arguments in the Appeal Brief (Ans. 10–16), in light of Appellant’s arguments in the Appeal Brief (Appeal Br. 20–29) and the Reply Brief (Reply Br. 4–6) that the Examiner has erred. We disagree with Appellant’s arguments.

Representative Claim 1 – Limitations D–F

With regard to representative independent claim 1, we adopt as our own (1) the findings and reasons set forth by the Examiner in the action from which this appeal is taken (Final Act. 5–8), and (2) the reasons set forth by the Examiner in the Examiner’s Answer (Ans. 10–15) in response to

Appellant’s Appeal Brief. We concur with the findings and conclusions reached by the Examiner. We provide the following for emphasis only.

The Examiner finds (Final 5–6; Ans. 10–15), and we agree, that Novack teaches collecting and operating on user and job characteristics in the manner claimed. Specifically, we agree with the Examiner that (i) Novack’s “traits possessed by a candidate” (Novack ¶ 3), and candidate profile 155 including objective information submitted by a job candidate such as majors, degrees, test scores, and quantitative information about competencies and skill assessments (Novack ¶ 30), teach or suggest the recited user characteristics; and (ii) Novack’s employer profile 156 including information about the employer, such as “qualifications and credentials that the employer 117 seeks in a qualified candidate for a particular career opportunity” (Novack ¶ 30), and weightings “indicat[ing] relative degrees of importance of various behavioral and personality traits and competency area assessments” (Novack ¶ 30) teaches or suggests the recited job characteristics.

The Examiner finds (Final Act. 6–7; Ans. 10–15), and we agree, that Novack teaches much of the subject matter of claim 1, including (i) determining a relevance score based on the job and user characteristics (Novack ¶¶ 3, 29, 30, 69, 86), as recited in limitation D; (ii) determining an aggregate score based on the relevance score and a job bid (Novack ¶ 3, 29, 30, 63, 69, 76, 86), as recited in limitation E; and (iii) presenting a message to a user on a user interface about the relevant and matching jobs (Novack Fig. 3, steps 346, 348; ¶¶ 3, 68, 69, 72, 75, 86), as recited in limitation F, of claim 1. Novack teaches prompting employers to assign “weightings to each of the selected traits to indicate the relative importance of the traits,” where

“weightings are values ranked in order from highest to lowest and/or selected from a range or scale (e.g., a scale of 1 to 10),” and where the range values correspond to the “degree of importance as perceived by the employer” (Novack ¶ 63). Novack also teaches (Novack ¶¶ 3, 69, 86) using the quantitative assessment information (i.e., user characteristics) and weighting values (i.e., job characteristics and relevance score) to produce a final score (i.e., aggregate score). Lastly, Novack teaches “transducing the score signal to an observable form” (Novack ¶ 3), and “only display[ing] those candidates whose scores exceed a given threshold value” (Novack ¶ 86). Yahia provides the added teaching (Yahia ¶ 50) that a bid price (i.e., job bid) is considered along with a quality score for results (i.e., relevance score) to produce a total score (i.e., aggregate score).

Because Appellant claims a “relevance score” that is “based on the job characteristic and the user characteristic” (claim 1), under the broadest reasonable interpretation of the term “relevance score,” either or both of Novack’s quantitative assessment information and weighting values is/are encompassed by the claimed relevance score. In other words, the “relevance score” recited in claim 1 reads on Novack’s quantitative assessment and/or weighting score.

We agree with the Examiner’s response (Ans. 13–15) to Appellant’s arguments in the Appeal Brief (*see* Appeal Br. 10–16), that Appellant argues the references individually, and not for the specific bases they were each relied upon for in the Final Rejection. We note that each reference cited by the Examiner must be read, not in isolation, but for what it fairly teaches in combination with the prior art as a whole. *See In re Merck & Co.*, 800 F.2d 1091, 1097 (Fed. Cir. 1986) (finding one cannot show non-obviousness by

attacking references individually where the rejections are based on combinations of references). In this light, Appellant's arguments presented as to the shortcomings in the teachings of Novack and Yahia individually are not persuasive inasmuch as the Examiner relies on a properly made *combination* of Novack and Yahia to support the conclusion of obviousness of the subject matter of claim 1.

Appellant has not adequately shown that the *combination* of Novack and Yahia teaches or suggests limitations D through F, as set forth in claim 1. In view of the foregoing, Appellant's contentions (Appeal Br. 10–16) that the Examiner erred in rejecting claim 1 as being obvious over the combination of Novack and Yahia are unpersuasive. Accordingly, we sustain the Examiner's obviousness rejection of representative claim 1, as well as claims 5, 6, 9–12, 17, 18, 21–24, 29, and 30 grouped therewith, as being unpatentable over the combination of Novack and Yahia.

Representative Dependent Claims 3 and 4

With regard to representative claims 3 and 4, we adopt as our own the findings and reasons set forth by the Examiner in the action from which this appeal is taken (Final Act. 8–9). We concur with the findings and conclusions reached by the Examiner. We provide the following for emphasis only.

Claim 3 recites, in pertinent part, “wherein the memory device further comprises instructions that further cause the processor to *determine the aggregate score by combining the relevance with the bid*” (claim 3) (emphases added). Claim 4 recites, in pertinent part, “wherein the memory device further comprises instructions that further cause the processor to *combine the relevance score with the bid by multiplying the relevance score*

with the bid” (claim 4) (emphases added). Broadly speaking, we note that the mathematical concept of multiplying is subsumed by the broader concept of combining. In other words, multiplying is a type of combining.

Yahia teaches (Yahia ¶ 50) that a bid price (i.e., job bid) is considered along with a quality score for results (i.e., relevance score) to produce a total score (i.e., aggregate score). Thus, we agree with the Examiner that “Yahia teaches determining an aggregate score by multiplying scores with bids” (Final Act. 8 citing Yahia ¶ 50). We also agree with the Examiner that Novack teaches (i) combining bid related information “with the qualitative assessment [information] to determine an overall assessment (scores combined with weights);” and (ii) that “weights applied to the scores are provided by the bidding employers and this bid related data is combined with the qualitative assessment” (Ans. 11, 12).

The Examiner finds and reasons (Final Act. 8–9), and we agree, that:

It would have been obvious to one of ordinary skill in the art, at the time of the invention, to have further modified the system of Nova[c]k so as to have determining an aggregate score by multiplying scores with bids, as taught by Yahia.

Nova[c]k discloses a “base” method/system in which scores are used to match criteria data with data in a profile, as shown above. Yahia teaches a comparable method/system in which scores are used to match criteria data with data in an advertisement, as shown above. Yahia also teaches an embodiment in which aggregate scores are determined by multiplying scores with bids, as shown above. To perform this limitation, Yahia combines the bids with the quality scores for the advertisements. The quality scores represent an overall match of material in the advertisement to criteria, similar to the matching of user data to employer criteria of Nova[c]k. Additionally, these scores are used to orde[r] the display of results similar to Nova[c]k. One of ordinary skill in the art would have recognized the adaptation of determining an

aggregate score by multiplying scores with bids to Nova[c]k could be performed with neither undue experimentation, nor risk of unexpected results since both systems would perform in the same manner in combination as they would perform separately. (See KSR [127 S Ct. at 1739] “The combination of familiar elements according to known methods is likely to be obvious when it does no more than yield predictable results.”)

(Final Act. 8–9). Thus, we conclude that one of ordinary skill in the art of calculating scores to rank relevant jobs for appropriate job applicants would find it useful to have as much information as possible on hand to perform the matching process, namely using percentages, combinations, and multiplications of the collected user and job data, as well as relevance scores. Combining and multiplying the relevance score and job bid as recited in claims 3 and 4 would have been obvious in order to provide more appropriately targeted messages to user about jobs based on relevancy determinations and employer interest (indicated by the amount of the job bid). In other words, the collected data and calculated scoring information could be combined in many different manners, including, predictably, the manners recited in Appellant’s claims 3 and 4.

Accordingly, we sustain the Examiner’s obviousness rejection of (i) representative claim 3, as well as claims 15 and 27 grouped therewith, as being unpatentable over the combination of Novack and Yahia; and (ii) representative claim 4, as well as claims 16 and 28 grouped therewith, as being unpatentable over the combination of Novack and Yahia.

Representative Dependent Claim 7

With regard to representative claim 7, we adopt as our own (1) the findings and reasons set forth by the Examiner in the Examiner’s Answer (Ans. 15–16) in response to Appellant’s Appeal Brief. We concur with the

findings and conclusions reached by the Examiner. We provide the following for emphasis only.

Claim 7 recites, in pertinent part, “wherein the memory device further comprises instructions that further cause the processor to *determine the relevance score based on a percentage of ones of the plurality of job characteristics that match ones of the plurality of user characteristics*” (claim 7) (emphases added). Appellant’s argument (*see* Appeal Br. 29) that Novack does not teach or suggest calculating percentages in the context of a relevance score is not persuasive in light of (i) the Examiner’s findings (a) that Novack determines percentages as described in paragraphs 63 and 64 (Ans. 16), and (b) the percentage of matching traits is related to the qualitative assessment (i.e., relevance score) (Ans. 12–16); and (ii) Novack’s teachings of (a) using “a minimum percentage of the trait criteria specified by the employer” (Novack ¶ 63), and (b) allowing an employer to “specify that a candidate must meet a minimum percentage of the integrity criteria specified by the employer,” like passing 4 out of 5 specified criteria (Novack ¶ 64).

Accordingly, we sustain the Examiner’s obviousness rejection of representative claim 7, as well as claims 19 and 31 grouped therewith, as being unpatentable over the combination of Novack and Yahia.

Summary

(1) As explained above, under the USPTO’s Revised Patent Eligibility Guidance, based on the record before us, and informed by our governing case law concerning 35 U.S.C. § 101, Appellant has not shown the Examiner erred in rejecting representative claim 1, as well as claims 3–7, 9–13, 15–19, 21–25, and 27–31 grouped therewith, as being directed to patent-ineligible

subject matter without significantly more, and we sustain the rejection of claims 1, 3–7, 9–13, 15–19, 21–25, and 27–31 under 35 U.S.C. § 101.

(2) In addition, Appellant has not shown the Examiner erred in rejecting claims 1, 3–7, 9–13, 15–19, 21–25, and 27–31 as being unpatentable under 35 U.S.C. § 103(a). In view of the foregoing, we sustain the obviousness rejection of (a) representative claim 1, as well as claims 5, 6, 9–12, 17, 18, 21–24, 29, and 30 grouped therewith; (b) representative claim 3, as well as claims 15 and 27 grouped therewith; and (c) representative claim 7, as well as claims 19 and 31 grouped therewith, as being obvious over the combination of Novack and Yahia.

CONCLUSION

In summary:

For all of the reasons above, we hold as follows:

Claims Rejected	35 U.S.C. §	Reference(s)/Basis	Affirmed	Reversed
1, 3–7, 9–13, 15–19, 21–25, 27–31	101	Eligibility	1, 3–7, 9–13, 15–19, 21–25, 27–31	
1, 3–7, 9–13, 15–19, 21–25, 27–31	103(a)	Novack, Yahia	1, 3–7, 9–13, 15–19, 21–25, 27–31	
Overall Outcome			1, 3–7, 9–13, 15–19, 21–25, 27–31	

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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)(1)(iv). *See* 37 C.F.R. §§ 41.50(f), 41.52(b) (2013).

AFFIRMED