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UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

Ex parte MICHAEL HUNTER GRAY

Appeal 2018-007906
Application 14/254,786
Technology Center 3600

Before PHILIP J. HOFFMANN, BRUCE T. WIEDER, and MATTHEW S. MEYERS, *Administrative Patent Judges*.

MEYERS, *Administrative Patent Judge*.

DECISION ON APPEAL

STATEMENT OF THE CASE

Appellant[1] appeals under 35 U.S.C. § 134(a) from the Examiner's Final Rejection of claims 1–8 and 10–17. We have jurisdiction under 35 U.S.C. § 6(b). An oral hearing was held on June 25, 2020.

We AFFIRM.

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[1] We use the term "Appellant" to refer to "applicant" as defined in 37 C.F.R. § 1.42. Our decision references Appellant's Appeal Brief ("Appeal Br.," filed December 12, 2017) and Reply Brief ("Reply Br.," filed July 31, 2018), and the Examiner's Answer ("Ans.," mailed June 1, 2018) and Final Office Action ("Final Act.," mailed July 14, 2017). Appellant identifies the real party in interest as "Calendar Research LLC" (Appeal Br. 2).

CLAIMED INVENTION

Appellant's claims relate generally "to the field of scheduling systems" and "more specifically to a scheduling system and method incorporating an appointment negotiation." Spec. ¶ 2.

Claims 1, 3, and 12 are the independent claims on appeal. Claim 1, reproduced below, with bracketed matter added, is illustrative of the claimed subject matter:

> 1. A method in one or more computer systems, the method comprising:
>
> [a] forming a group of members;
>
> [b] determining, for each member in the group of members, a corresponding messaging protocol to be used for communicating with the member, wherein the corresponding messaging protocol is at least one of a messaging protocol for short message service (SMS) text messages or a messaging protocol for a user application having push notifications;
>
> [c] sending an appointment request message to each member of the group of members using the corresponding messaging protocol for the member, the appointment request message including one or more plans for a meeting, the one or more plans each comprising time and location information;
>
> [d] receiving responses to the appointment request message wherein, for each member of the group of members, a corresponding response to the appointment request message is received using the corresponding messaging protocol; and
>
> [e] updating the calendar system of each member of the group of members by adding a calendar event with a time for an appointment for the meeting that is based on the received responses.

REJECTIONS

1. Claims 1–8 and 10–17 are rejected under 35 U.S.C. § 101 as directed to a judicial exception without significantly more.

2. Claims 1–6, 10, and 12–15 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Beckhardt et al. (US 6,085,166, iss. July 4, 2000) and Alharayeri et al. (US 2009/0181653 A1, pub. July 16, 2009) ("Alharayeri").

3. Claims 7, 8, 11, 16, and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Beckhardt, Alharayeri, and Olliphant (US 2012/0191501 A1, pub. July 26, 2012).[2]

ANALYSIS

Patent-Ineligible Subject Matter

A. Section 101

An invention is patent-eligible if it claims a "new and useful process, machine, manufacture, or composition of matter." 35 U.S.C. § 101. However, the U.S. 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 Court's two-part 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

[2] The Examiner indicates that claims 7, 8, 16, and 17 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Beckhardt and Olliphant. Final Act. 19. However, claims 7, 8, 16, and 17, each depends from a claim rejected under 35 U.S.C. § 103(a) as being unpatentable over Beckhardt and Alharayeri. *See, e.g.*, Final Act. 6. Accordingly, we understand the asserted rejection of claims 7, 8, 11, 16, and 17 to also be based on Alharayeri.

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 waterproof cloth, vulcanizing India rubber, smelting ores" (*id.* at 182 n.7 (quoting *Corning v. Burden*, 56 U.S. 252, 267–68 (1853))); and manufacturing flour (*Benson*, 409 U.S. at 69 (citing *Cochrane v. Deener*, 94 U.S. 780, 785 (1876))).

In *Diehr*, the claim at issue recited a mathematical formula, but the 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 187; *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 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.* (citation omitted) (citing *Benson* and *Flook*); *see, e.g.*, *id.* at 187 ("It is now commonplace that an *application* of a law of nature or mathematical formula to a known structure or process may well be deserving of patent protection.").

If the claim is "directed to" an abstract idea, we turn to the second step of the *Alice* and *Mayo* framework, where "we must examine the elements of the claim to determine whether it contains an 'inventive concept' sufficient to 'transform' the claimed abstract idea into a patent-eligible application." *Alice*, 573 U.S. at 221 (quotation marks 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.*

B. USPTO Section 101 Guidance

In January 2019, the U.S. Patent and Trademark Office (USPTO) published revised guidance on the application of § 101. 2019 Revised Patent Subject Matter Eligibility Guidance, 84 Fed. Reg. 50 (Jan. 7, 2019) ("2019 Revised Guidance").[3] "All USPTO personnel are, as a matter of internal agency management, expected to follow the guidance." *Id.* at 51; *see also* October 2019 Update at 1.

[3] In response to received public comments, the Office issued further guidance on October 17, 2019, clarifying the 2019 Revised 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).

Under the 2019 Revised Guidance and the October 2019 Update, 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 One"); and
>
> (2) additional elements that integrate the judicial exception into a practical application (*see* MPEP § 2106.05(a)–(c), (e)–(h) (9th ed. Rev. 08.2017, Jan. 2018)) ("Step 2A, Prong Two").[4]

2019 Revised Guidance, 84 Fed. Reg. at 52–55.

Only if a claim (1) recites a judicial exception and (2) does not integrate that exception into a practical application, do we then look, under Step 2B, 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.

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[4] 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, i.e., "appl[ies], rel[ies] on, or use[s] the judicial exception in a manner that imposes a meaningful limit on the judicial exception, such that the claim is more than a drafting effort designed to monopolize the judicial exception." *See* 2019 Revised Guidance - Section III(A)(2), 84 Fed. Reg. 54–55.

2019 Revised Guidance, 84 Fed. Reg. at 52–56.

Independent claim 1 and dependent claim 2

Appellant argues claims 1 and 2 as a group. Appeal Br. 11–16; Reply Br. 3–9. We select independent claim 1 as representative. Claim 2 stands or falls with claim 1. *See* 37 C.F.R. § 41.37(c)(1)(iv).

Step One of the Mayo/Alice Framework

With regard to the first step of the *Mayo/Alice* framework and Step 2A, Prong One of the 2019 Revised Guidelines, 84 Fed. Reg. at 54, the Examiner determines that exemplary independent claim 1 broadly recites "a method for managing of schedules within a calendar." Final Act. 3. The Examiner considers this to be an abstract idea, inasmuch as the claims are similar to "concepts relating to processes of organizing information that can be performed mentally . . . , such as collecting information, analyzing it, and displaying certain results of the collection and analysis (Electric Power Group) and data recognition and storage (Content Extraction)." *Id.* at 3–4.

In response, Appellant argues that independent claim 1 is not directed to an abstract idea because "[t]he Office Action . . . overgeneralizes the claim in a way that was directly warned against by the Federal Circuit when performing the abstract idea step of the patent eligibility analysis." Appeal Br. 11 (emphasis omitted); *see also* Reply Br. 3–5. According to Appellant, [w]hen considering claim l as a whole, it is apparent that the claim is about much more than just 'managing of schedules within a calendar.'" Appeal Br. 11; Reply Br. 3–5.

We are not persuaded that the Examiner erred in determining that independent claim 1 is directed to an abstract idea. The Federal Circuit has

explained that "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) (quoting *Internet Patents Corp. v. Active Network, Inc.*, 790 F.3d 1343, 1346 (Fed. Cir. 2015)). It asks whether the focus of the claims is on a specific improvement in relevant technology or on a process that itself qualifies as an "abstract idea" for which computers are invoked merely as a tool. *See id.* at 1335–36.

In making this determination we note that the Specification is titled "APPOINTMENT NEGOTIATION SYSTEMS AND METHODS," and states that the disclosure relates generally "to the field of scheduling systems" and "more specifically to a scheduling system and method incorporating an appointment negotiation." Spec. ¶ 2. According to the Specification, "[m]ost computer-based collaboration tools are project or team-centric," such that, in the process of scheduling appointments, "[d]ifferent users may use different applications to manage interaction with other users." *Id.* ¶ 3. The Specification identifies that, in order to schedule appointments, "[s]ome people use e-mail, text messages, or video chat to communicate with other users to reach a consensus on the time and location that is agreeable to everyone." *Id.* The Specification acknowledges that "[t]here are many applications that promise to connect individuals," but instead, these application "keep individuals further apart." *Id.* To address these drawbacks, the present invention "allows two or more users to negotiate in setting up an appointment, without the users using another calendar application or email." *Id.* ¶ 37.

Consistent with this disclosure, independent claim 1 recites a method comprising steps for (1) "forming a group of members" (step [a]); (2) "determining … a corresponding messaging protocol" and "sending an appointment request message to each member of the group of members" (steps [b], [c]); (3) "receiving responses to the appointment request message" (step [d]); and (4) "updating the calendar system of each member of the group of members" (step [e]).

Upon reviewing the Specification and independent claim 1, as summarized above, we agree with the Examiner that independent claim 1 recites broadly a series of steps for the "manag[ement] of schedules within a calendar" (Final Act. 3), which can be characterized as a certain method of organizing human activity. Here, independent claim 1 forms a group of members (step [a]), determines a messaging protocol and sends an appointment request using the protocol (steps [b], [c]), and then receives responses and updates the calendar system by adding a calendar event (steps [d], [e]). In other words, claim 1 broadly recites a method for managing schedules within a calendar by analyzing information (e.g., forming a group of members and determining, for each member in the group of members, a corresponding messaging protocol), sending information (e.g., sending an appointment request message), receiving information (e.g., receiving responses), and analyzing information (e.g., updating the calendar system by adding a calendar event). *Cf.* Final Act. 3–4.

Thus, it is clear that independent claim 1 recites a form of schedule management that, under the 2019 Revised Guidance, falls under the category of "[c]ertain methods of organizing human activity." and more specifically, "managing personal behavior or relationships or interactions between people

(including social activities, teaching, and following rules or instructions)." 2019 Revised Guidance, 84 Fed. Reg. at 52. Accordingly, independent claim 1 recites an abstract idea. *See Electric Power Grp., LLC v. Alstom S.A.*, 830 F.3d 1350, 1351–54 (Fed. Cir. 2016) (claim for detecting events by receiving, detecting, analyzing, displaying, accumulating, and updating data, and deriving a composite indicator from that data was directed to the abstract idea of "collecting information, analyzing it, and displaying certain results of the collection and analysis").

Having concluded that claim 1 recites a judicial exception, i.e., an abstract idea, we turn to Step 2A, Prong Two of the 2019 Revised Guidance and determine whether the claim integrates the recited judicial exception into a practical application of the judicial exception. Here we look to see if, for example, any additional elements of the claim (i) reflect an improvement in the functioning of a computer or to another technological field, (ii) implement the judicial exception with, or by use of, a particular machine, (iii) effect a transformation or reduction of a particular article to a different state or thing, or (iv) use the judicial exception in some other meaningful way beyond generally linking the use of the judicial exception to a particular technological environment. *See* 2019 Revised Guidance, 84 Fed. Reg. at 55; *see also* MPEP §§ 2106.05(a)–(c), (e)–(h).

According to the Examiner, the additional elements recited in claim 1 beyond the abstract idea are the steps of "sending an appointment request message," "receiving responses to the appointment request message," and "updating the calendar system." However, these additional elements are described generically in the Specification (*see, e.g.*, Spec. ¶¶ 38–45, 53–64, 91–99). We find no indication in the Specification, nor does Appellant

direct us to any indication, that the steps recited in claim 1 invoke any assertedly inventive programming, require any specialized computer hardware or other inventive computer components, i.e., a particular machine, or that the claimed invention is implemented using other than generic computer components to perform generic computer functions. *See DDR Holdings, LLC v. Hotels.com, L.P.*, 773 F.3d 1245, 1256 (Fed. Cir. 2014) ("[A]fter *Alice*, there can remain no doubt: recitation of generic computer limitations does not make an otherwise ineligible claim patent-eligible.").

We also find no indication in the Specification that the claimed invention effects a transformation or reduction of a particular article to a different state or thing. Nor do we find anything of record that attributes an improvement in computer technology and/or functionality to the claimed invention or that otherwise indicates that the claimed invention integrates the abstract idea into a "practical application," as that phrase is used in the 2019 Revised Guidance.

Appellant argues that independent claim 1 "is focused on a specific improvement in computer capabilities that is not abstract." Appeal Br. 11, 13–15; Reply Br. 3–5. Appellant attributes this purported technical improvement to the steps of "determining," "sending," and "receiving,", which together "allow for users that are using different applications or even no application and only text messaging to establish an appointment time for a meeting while using their different messaging protocols." Appeal Br. 15 (emphases omitted).

Appellant's argument is not persuasive. Here, the focus of independent claim 1 is not on any technological advancement, but rather on the implementation of the abstract idea, "for which computers are invoked

merely as a tool." *See Enfish, LLC v. Microsoft Corp.*, 822 F.3d 1327, 1336 (Fed. Cir. 2016). In this regard, the Specification discloses: that the

> Appointment negotiation system 104 includes a processing circuit 1002 including a processor 1004 and memory 1006. Processor 1002 may be implemented as a general purpose processor, an application specific integrated circuit (ASIC), one or more field programmable gate arrays (FPGAs), a group of processing components, or other suitable electronic processing components. Memory 1004 is one or more devices (e.g., RAM ROM, flash memory, hard disk storage, etc.) for storing data and/or computer code for completing and/or facilitating the various user or client processes, layers, and modules described in the present disclosure.

Spec. ¶ 92. And, Appellant has not persuasively explained how the claimed steps of "determining," "sending," and "receiving," provide a technological improvement or overcome a problem specifically arising in the realm of computer networks. For example, with respect to the step of "determining . . . a corresponding messaging protocol to be used for communicating with the member," the Specification discloses that a server computer determines a method of communication, i.e., "corresponding messaging protocol," based simply on a stored user list. Spec. ¶ 151. More particularly, the Specification discloses that

> [t]he mobile device may communicate with a server computer to determine which of the phone numbers or e-mails of the invitees has been previously registered with the client application on the mobile device. When a user has previously registered the user receives push notification through the application platform, or text messages based on the selected settings. Users that have not previously registered receive message through the SMS, or text message platform.

Id. Here, independent claim 1, unlike the claims found non-abstract in prior cases, uses generic computer technology and processes to analyze, send, and

receive scheduling information, and does not recite an improvement to a particular computer technology. *See McRO, Inc. v. Bandai Namco Games Am. Inc.*, 837 F.3d 1299, 1314–15 (Fed. Cir. 2016) (finding claims not abstract because they "focused on a specific asserted improvement in computer animation").

Appellant contends that the claims on appeal are similar to the claims "in *Enfish*, *McRO*, *Finjan*, and *Core Wireless*" because "the claims of the present application are directed to software-based innovations that make non-abstract improvements to computer technology." Reply Br. 4; *see also* Appeal Br. 13. We cannot agree.

In *Enfish*, the Federal Circuit rejected a § 101 challenge at step one of the *Mayo/Alice* analysis because the claims focused on "a specific type of data structure [i.e., a self-referential table for a computer database] designed to improve the way a computer stores and retrieves data in memory." *Enfish*, 822 F.3d at 1339. The court emphasized that the claims were not directed to any form of storing tabular data, but were instead directed to a *self-referential table* for a computer database. *Id.* at 1337. And, the court explained that the table stored information related to each column in rows of the table, such that new columns could be added by simply creating new rows. *Id.* at 1338. Based on the "plain focus of the claims," the court, thus, held that the claims were directed to "a specific improvement to the way computers operate, embodied in the self-referential table," and, as such, were more than a mere abstract idea. *Id.* at 1336.

In *McRO*, the Federal Circuit premised its determination that the claims were patent-eligible, not merely on the specificity of the claimed animation scheme, but rather on the fact that the claims, when considered as

a whole, were directed to a technological improvement over the existing, manual 3-D animation techniques and used limited rules in a process specifically designed to achieve an improved technological result in conventional industry practice. *See McRO*, 837 F.3d at 1314–15.

In *Finjan, Inc. v. Blue Coat Sys., Inc*., 879 F.3d 1299, 1303 (Fed. Cir. 2018), the question was "whether [the claimed] behavior-based virus scan . . . constitutes an improvement in computer functionality," and the court found the claimed behavior-based virus scan constituted an improvement in computer functionality over "traditional, 'code-matching' virus scans." *Finjan*, 879 F.3d at 1304. The court determined that the claimed method employed a new kind of file that allowed access to be tailored to different users, and allowed the system to accumulate and use newly available, behavior-based information regarding potential threats. *Id.* at 1305. The court ultimately held the *Finjan* claims were "directed to a non-abstract improvement in computer functionality, rather than the abstract idea of computer security," and "recite[d] specific steps—generating a security profile that identifies suspicious code and linking it to a downloadable—that accomplish the desired result." *Id.*

And, in *Core Wireless Licensing S.A.R.L. v. LG Elecs., Inc.*, 880 F.3d 1356 (Fed. Cir. 2018), the claims were directed to "an improved user interface for electronic devices, particularly those with small screens." *Core Wireless*, 880 F.3d at 1363. The specification described that "prior art interfaces had many deficits relating to the efficient functioning of the computer, requiring a user 'to scroll around and switch views many times to find the right data/functionality,'" and disclosed that the claimed invention improved the "efficiency of using the electronic device by bringing together

'a limited list of common functions and commonly accessed stored data,' which can be accessed directly from the main menu." *Id.* The specification also disclosed that "[t]he speed of a user's navigation through various views and windows" was improved because it "saves the user from navigating to the required application, opening it up, and then navigating within that application to enable the data of interest to be seen or a function of interest to be activated" — disclosure that the Federal Circuit concluded "clearly indicates that the claims are directed to an improvement in the functioning of computers, particularly those with small screens." *Id.*

After considering Appellant's arguments regarding *Enfish*, *McRO*, *Finjan*, and *Core Wireless*, we are not persuaded that a comparable situation is presented here. There is a fundamental difference between technological or computer functionality improvements, on the one hand, and uses of existing computers as tools to perform a particular task, on the other. Here, the Specification generically describes the technical environment (*see, e.g.*, Spec. ¶ 92) and does not disclose any related technical improvements. Indeed, the Federal Circuit applied this distinction in *Enfish* because the claims in *Enfish* focused on a specific type of data structure, i.e., a self-referential table for a computer database, designed to improve the way a computer carries out its basic functions of storing and retrieving data, and not on asserted advances in uses to which existing computer capabilities could be put, i.e., merely using the computer as a tool to perform the abstract idea. *Enfish*, 822 F.3d 1335–36.

Here, there is no such improvement to technology or a technological process. The Appellant does not assert an improvement in the technical or technological aspects operative to analyze information (i.e., determine a

corresponding messaging protocol), send information (e.g., an appointment request message), receive information (e.g., responses), and analyze additional information (i.e., update the calendar system). The Appellant also does not direct our attention to anything in the Specification to indicate that the invention provides a technical improvement or that exemplary independent claim 1 incorporates technical improvements, such as, rules to automate a subjective task of humans, similar to those in *McRO*.

Having determined under step one of the *Mayo*/*Alice* framework that claim 1 is directed to an abstract idea, we next consider under Step 2B of the 2019 Revised Guidance, the second step of the *Mayo*/*Alice* framework, whether claim 1 includes additional elements or a combination of elements that provides an "inventive concept," i.e., whether the additional elements amount to "significantly more" than the judicial exception itself. 2019 Revised Guidance, 84 Fed. Reg. at 56.

Appellant argues that "[t]he elements of the present claims and the combinations thereof were not widely prevalent or in common use in the relevant industry, and the Office Action and Examiner's Answer fail to provide any facts to indicate that the specific limitations and combinations thereof were ever in use in the relevant industry," as required by *Berkheimer v. HP Inc.*, 881 F.3d 1360 (Fed. Cir. 2018). Reply Br. 6. However, "the relevant inquiry is not whether the claimed invention as a whole is unconventional or non-routine." *BSG Tech LLC v. BuySeasons, Inc.*, 899 F.3d 1281, 1290 (Fed. Cir. 2018). Instead, the question is whether the claim includes additional elements, i.e., elements other than the abstract idea itself, that "'transform the nature of the claim' into a patent-eligible

application." *Alice Corp.*, 573 U.S. at 217 (quoting *Mayo*, 566 U.S. at 79, 78).

Here, the Examiner determined that "the claim recites the additional elements of: sending an appointment request message …; receiving responses to the appointment request message …; and updating the calendar system … based on the received responses." Final Act. 4. The Examiner further determined that

> the elements of the server are recited at a high level of generality and given the broadest reasonable interpretation are simply generic computers performing generic computer functions of: receiving, processing, and storing data; transmitting data over a network; and electronic recordkeeping.

Id. Consequently, the Examiner concludes that

> the claims merely amount[] to the application or [sic] instructions to apply the abstract idea (i.e. manag[ement] of schedules within a calendar) on a computer, and is considered to amount to nothing more than requiring a generic computer system (e.g. a generic processor) to merely carry out the abstract idea itself.

Id. at 5.

We agree with the Examiner that the steps performed by these components are well-understood, routine, or conventional. As discussed above, there is nothing in the Specification to indicate that the steps recited in claim 1 require any specialized hardware or inventive computer components or that the claimed invention is implemented using anything other than generic computer components to perform generic computer functions, e.g., analyzing, sending, and receiving information.

Viewed as a whole, independent claim 1 simply recites a series of steps instructing how to manage calendar event scheduling. *See Ultramercial, Inc. v. Hulu, LLC*, 772 F.3d 709, 716 (Fed. Cir. 2014) ("[T]he

claimed sequence of steps comprises only 'conventional steps, specified at a high level of generality,' which is insufficient to supply an 'inventive concept.'") (Citing *Alice*, 134 S. Ct. at 2357). Here, independent claim 1 does not, for example, purport to improve the functioning of the computer itself. Nor does it effect an improvement in any other technology or technical field, as discussed above with respect to prong two of step 2A. Instead, independent claim 1 amounts to nothing significantly more than an instruction to apply the abstract idea using generic computing elements, which under our precedents, is not enough to transform an abstract idea into a patent-eligible invention. *See Alice*, 134 S. Ct. at 2360.

Appellant's other arguments, including those directed to now-superseded USPTO guidance, have been considered but are not persuasive of error. (*See* 2019 Revised Guidance, 84 Fed. Reg. at 51 ("Eligibility-related guidance issued prior to the Ninth Edition, R-08.2017, of the MPEP (published Jan. 2018) should not be relied upon.")).

We are not persuaded, on the present record, that the Examiner erred in rejecting independent claim 1 under 35 U.S.C. § 101. Therefore, we sustain the Examiner's rejection of independent claim 1, and dependent claim 2, which falls with independent claim 1.

Independent claim 3 and dependent claims 4–8, 10–11

Appellant argues claims 3–8 and 10–11 as a group. Appeal Br. 16–20; Reply Br. 14. We select independent claim 3 as representative. The remaining claims stand or fall with claim 3. *See* 37 C.F.R. § 41.37(c)(1)(iv).

Claim 3 recites generally a method comprising "receiving a request from a user to establish an appointment …," "determining … a

corresponding messaging protocol," "sending … a corresponding negotiating message using the corresponding messaging protocol," "receiving … one or more corresponding responses indicating an approval of rejection," and "determining … a time for the appointment for the meeting."

Appellant's arguments for independent claim 3 are based on the same arguments discussed above with respect to independent claim 1 (*see* Appeal Br. 16–20). As such, we are similarly not persuaded by Appellant's arguments for the same reasons as to independent claim 1, *supra.* Therefore, we sustain the rejection of independent claim 3, and its respective dependent claims under 35 U.S.C. § 101.

Independent claim 12 and dependent claims 13–17

Appellant argues claims 12–17 as a group. Appeal Br. 20–23; Reply Br. 16. We select independent claim 12 as representative. The remaining claims stand or fall with claim 12. *See* 37 C.F.R. § 41.37(c)(1)(iv).

Claim 12 recites generally an apparatus comprising an appointment negotiation system configured to execute computer code to perform a process comprising "receiving one or more plans for a meeting," "receiving, using a text messaging protocol for short message service (SMS) text messages, one or more text message responses," "receiving, from a user application executed on a remote device using a protocol for the user application, at least one response from at least one of the at least two invitees," "determining … a time for an appointment for the meeting," and "sending a message to the organizer and the at least two invitees regarding the time for the appointment for the meeting."

Appellant's arguments for independent claim 12 are based on the same arguments discussed above with respect to independent claim 1 (*see* Appeal Br. 20–23). As such, we are similarly not persuaded by Appellant's arguments for the same reasons as to independent claim 1, *supra.* Therefore, we sustain the rejection of independent claim 12, and its respective dependent claims under 35 U.S.C. § 101.

Obviousness

The Rejection of Claims 1–6, 10, 12–15 under 35 U.S.C. § 103(a) as unpatentable over Beckhardt and Alharayeri.

Independent Claim 1 and Dependent Claim 2.

We are persuaded by Appellant's argument that the Examiner erred in rejecting independent claim 1 under 35 U.S.C. § 103(a) because Alharayeri, upon which the Examiner relies, fails to disclose or suggest "sending an appointment request message to each member of the group of members using the corresponding messaging protocol for the member, the appointment request message including one or more plans for a meeting, the one or more plans each comprising time and location information," as recited by limitation [c] of independent claim 1. Appeal Br. 23–29; Reply Br. 9–14.

The Examiner maintains that the rejection is proper, and cites Alharayeri, as disclosing "sending a message to each member of the group of members using the corresponding messaging protocol for the member, including one or more plans for a meeting." Ans. 12–13 (citing Alharayeri ¶¶ 23, 36); Final Act. 10–11 (citing Alharayeri ¶¶ 23, 36). However, we agree with Appellant that there is nothing in the cited portions that discloses or suggests the argued limitation.

In making this determination, we note that independent claim 1 recites

> determining, for each member in the group of members, a corresponding messaging protocol to be used for communicating with the member, wherein the corresponding messaging protocol is at least one of a messaging protocol for short message service (SMS) text messages or a messaging protocol for a user application having push notifications;

Appeal Br. 41, Claims App. Independent claim 1 further recites

> sending an appointment request message to each member of the group of members using the corresponding messaging protocol for the member, the appointment request message including one or more plans for a meeting, the one or more plans each comprising time and location information.

Id. Therefore, the claimed step of "sending an appointment request message" requires a corresponding messaging protocol that "is at least one of a messaging protocol for short message service (SMS) text messages or a messaging protocol for a user application having push notifications."

We further note that the rejection of record does not assert that Alharayeri discloses "a messaging protocol for a user application having push notifications" in the context of "sending an appointment request message." Final Act. 10. Instead, the rejection of record relies on Alharayeri as disclosing sending a message using a messaging protocol for short message service (SMS) text messages. *Id.*

Alharayeri is directed to "exchanging information using mobile communication devices and, in particular, exchanging personal information between one or more mobile communication devices." Alharayeri ¶ 2. In one embodiment, Alharayeri "allows individuals to use their mobile phones to discover others . . . over the [I]nternet by bypassing the inherent limitations of existing Bluetooth technology." *Id.* ¶ 9. For example, a

requesting user may transmit an invitation to a discovered user in order to exchange information with the discovered user. *Id.* ¶¶ 14, 23. However, Alharayeri discloses that, in order to enable the exchange of personal information via communications with the service, a user must register with the service by downloading a client-side application to the user's mobile device. *Id.* ¶¶ 36, 38. As a result, the system of Alharayeri

> sends to the mobile device a notification via SMS (Short Messaging Service). The SMS message, also known as a text message, alerts the new user to click on an internet link to install the service provider's client-side application on his/her mobile device.

Id. ¶ 36.

We have reviewed the cited portions of Alharayeri and agree with Appellant that none of the cited portions of Alharayeri, alone or in combination, discloses or suggests the argued limitation. Appeal Br. 25–28. Instead, we agree with Appellant that, even if Alharayeri discloses sending a short message service (SMS) text message, Alharayeri does not "allow for sending one or more plans for a meeting using a messaging protocol for short message service (SMS) text messages," as required by limitation [c] of independent claim 1. Appeal Br. 25. Although we agree with the Examiner that Alharayeri discloses sending an SMS text message (Ans. 9), we cannot agree with the Examiner that Alharayeri discloses a "sending a message to each member of the group of members using the corresponding messaging protocol for the member, *including one or more plans for a meeting*." Final Act. 8 (emphasis added). Specifically, Alharayeri discloses that SMS text messages are only transmitted as a prompt to download and install the service provider's client-side application, which is required to enable communication with the service. Alharayeri ¶¶ 36, 38. The service of

Alharayeri does not, however, disclose sending one or more plans for a meeting using an SMS text message. *Cf.* Final Act. 8–11.

Accordingly, we do not sustain the Examiner's rejection of independent claim 1 under 35 U.S.C. § 103(a). For the same reasons, we also do not sustain the Examiner's rejection of dependent claim 2, which is not argued separately.

Independent Claim 3 and Dependent Claims 4–6 and 10.

We are not persuaded by Appellant's argument that the Examiner erred in rejecting independent claim 3 under 35 U.S.C. § 103(a) because the combination of Beckhardt and Alharayeri fails to disclose the subject matter of independent claim 3. *See* Appeal Br. 29–34; Reply Br. 14. Instead, we agree with, and adopt, the Examiner's findings and rationales as our own. *see* Final Act. 11–16 (citing Beckhardt, col. 2, ll. 22–30, col. 3, ll. 5–15, col. 5, ll. 32–43, col. 7, ll. 15–20, col. 8, ll. 36–54, col. 9, ll. 14–53, col. 10, ll. 48–56; Alharayeri ¶¶ 10, 14, 23, 35–36, 51 and cl. 14). We add the following discussion for emphasis.

Appellant argues that the combination of Beckhardt and Alharayeri fails to disclose or suggest

> determining, for each of the at least two invitees, a corresponding messaging protocol to be used for communicating with the invitee, wherein the corresponding messaging protocol is at least one of a messaging protocol for short message service (SMS) text messages or a messaging protocol push notifications for a user application.

Appeal Br. 29. More particularly, Appellant argues that Alharayeri does not disclose "wherein the corresponding messaging protocol is at least one of a messaging protocol for short message service (SMS) text messages or a

messaging protocol push notifications for a user application" because "[t]he only use of SMS in Alharayeri is to send a web link to the client-side application that the user clicks on to install the client-side application." *Id.* 29–30. We do not find this argument persuasive.

At the outset, we note that the Examiner does not rely on Alharayeri alone to address the argued limitation, but rather on the combined teachings of Beckhardt and Alharayeri. Final Act. 11–16. In contrast to Appellant's argument, the Examiner relies on Beckhardt to address: (i) "determining, for each of the at least two invitees, a corresponding messaging protocol to be used for communicating with the invitee" (*see* Final Act. 13 (citing Beckhardt, col. 10, ll. 48–56)); (ii) "sending, to each of the at least two invitees, a corresponding negotiating message using the corresponding messaging protocol" (*see* Final Act. 13 (citing Beckhardt, col. 5, ll. 32–43; col. 9, ll. 42–53)); and (iii) "the corresponding negotiating message comprising one or more plans for a meeting, each plan including time information and location information for the meeting" (*see* Final Act. 13 (citing Beckhardt, col. 9, ll. 26–35)). The Examiner acknowledges that "Beckhardt does not [disclose] wherein the corresponding messaging protocol is at least one of a messaging protocol for short message service (SMS) text messages or a messaging protocol for a user application having push notifications." Final Act. 14.

The Examiner finds, however, that Alharayeri remedies the aforementioned deficiency of Beckhardt as "Alharayeri teaches wherein the corresponding messaging protocol is at least one of a messaging protocol for short message service (SMS) text messages or a messaging protocol for a

user application having push notifications." *Id.* (citing Alharayeri ¶¶ 10, 14, 23, 35–36, 51 and cl. 14).

We are not persuaded of error by Appellant's argument that "Alharayeri does not allow for sending an invitation for a meeting through SMS" (*see* Appeal Br. 31) because the argument attacks the references individually rather than as combined by the Examiner in the rejection. "Non-obviousness cannot be established by attacking references individually where the rejection is based upon the teachings of a combination of references." *In re Merck & Co.*, 800 F.2d 1091, 1097 (Fed. Cir. 1986) (citing *In re Keller*, 642 F.2d 413, 425 (CCPA 1981)). As discussed above, the Examiner does not rely on Alharayeri for disclosing "sending, to each of the at least two invitees, a corresponding negotiating message using the corresponding messaging protocol." *See* Final Act. 13 (citing Beckhardt, col. 5, ll. 32–43; col. 9, ll. 42–53). Rather, the Examiner relies on Alharayeri only as disclosing "wherein the corresponding messaging protocol is at least one of a messaging protocol for short message service (SMS) text messages or a messaging protocol for a user application having push notifications" (*Id.* at 14 (citing Alharayeri ¶¶ 10, 14, 23, 35–36, 51 and cl. 14)), and, as discussed above, Alharayeri discloses sending an SMS text message. Appellant has presented no persuasive argument or technical reasoning to demonstrate that the Examiner's finding is unreasonable or unsupported.

We also are not persuaded of error by Appellant's argument that the Examiner's proposed combination of Beckhardt and Alharayeri is improper because it is based on the impermissible use of hindsight. Appeal Br. 33–34. In this regard, we note the Examiner provides articulated reasoning with

some rational underpinning to support the obviousness determination (*see* Final Act. 15–16). *See KSR Int'l Co. v. Teleflex Inc.*, 550 U.S. 398, 418 (2007) (citing *In re Kahn*, 441 F.3d 977, 988 (Fed. Cir. 2006)).

In view of the foregoing, we sustain the Examiner's rejection of independent claim 3 under 35 U.S.C. § 103(a). For the same reasons, we also sustain the Examiner's rejection of dependent claims 4–6 and 10, which are not argued separately.

Independent Claim 12 and Dependent Claims 13–15.

We are persuaded by Appellant's argument that the Examiner erred in rejecting independent claim 12 under 35 U.S.C. § 103(a) because Alharayeri, upon which the Examiner relies, fails to disclose or suggest "receiving, using a text messaging protocol for short message service (SMS) text messages, one or more text message responses from one or more of the at least two invitees, the one or more text message responses indicating an approval or rejection of the one or more plans," as recited by independent claim 12. Appeal Br. 34–39; Reply Br. 14–16.

The Examiner maintains that the rejection is proper, and cites Alharayeri, as disclosing "using a text messaging protocol for short message service (SMS) text messages, one or more text message[s]; the one or more text message responses." Ans. 13–14 (citing Alharayeri ¶¶ 14, 23, 36); Final Act. 18 (citing Alharayeri ¶¶ 14, 23, 36). However, we agree with Appellant that there is nothing in the cited portions that discloses or suggests the argued limitation.

In making this determination, we note that Alharayeri is directed to "exchanging information using mobile communication devices and, in

particular, exchanging personal information between one or more mobile communication devices." Alharayeri ¶ 2. As summarized above, Alharayeri discloses that, in order to enable the exchange of personal information via communications with the service, a user must register with the service by downloading a client-side application to the user's mobile device. *Id.* ¶¶ 36, 38. As a result, the system of Alharayeri

> sends to the mobile device a notification via SMS (Short Messaging Service). The SMS message, also known as a text message, alerts the new user to click on an internet link to install the service provider's client-side application on his/her mobile device.

Id. ¶ 36.

We have reviewed the cited portions of Alharayeri and agree with Appellant that none of the cited portions of Alharayeri, alone or in combination, discloses or suggests the argued limitation. Instead, we agree with Appellant that, even if Alharayeri discloses sending a short message service (SMS) text message, Alharayeri does not disclose "receiving, using a text messaging protocol for short message service (SMS) text messages, one or more text message responses from one or more of the at least two invitees," as required by independent claim 12. Appeal Br. 35. Although we agree with the Examiner that Alharayeri discloses sending an SMS text message (Ans. 13–14), we cannot agree with the Examiner that Alharayeri discloses a "receiving . . . one or more text message responses" because Alharayeri discloses that SMS text messages are only transmitted from the service provider to the user as a prompt to download and install the service provider's client-side application, which is required to enable communication with the service. Alharayeri ¶¶ 36, 38. The service of

Alharayeri does not, however, disclose receiving text message responses using an SMS text message.

Accordingly, we do not sustain the Examiner's rejection of independent claim 12 under 35 U.S.C. § 103(a). For the same reasons, we also do not sustain the Examiner's rejection of dependent claims 13–15, which are not argued separately.

The Rejection of Claims 7, 8, 11, 16, and 17 under 35 U.S.C. § 103(a) as unpatentable over Beckhardt, Alharayeri, and Olliphant.

Each of claims 7, 8, and 11 depends, directly or indirectly, from independent claim 3. Appellant's argument for the rejections of these claims are the same as for claim 3. Accordingly, we sustain the Examiner's rejection of dependent claims 7, 8, and 11 under 35 U.S.C. § 103(a) for the same reasons as set forth above with respect to independent claim 3.

Each of claims 16 and 17 depends, directly or indirectly, from independent claim 12. Accordingly, we do not sustain the Examiner's rejection of dependent claims 16 and 17 under 35 U.S.C. § 103(a) for the same reasons as set forth above with respect to independent claim 12, as the additional reference, Olliphant, is not cited to remedy the aforementioned deficiency.

CONCLUSION

In summary:

Claims Rejected	35 U.S.C. §	Reference(s)/Basis	Affirmed	Reversed
1–8, 10–17	101	Eligibility	1–8, 10–17	

Claims Rejected	35 U.S.C. §	Reference(s)/Basis	Affirmed	Reversed
1–6, 10, 12–15	103	Beckhardt, Alharayeri	3–6, 10	1, 2, 12–15
7, 8, 11, 16, 17	103	Beckhardt, Alharayeri, Olliphant	7, 8, 11	16, 17

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

AFFIRMED