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UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

Ex parte MICHELLE FISHER

Appeal 2019-004734
Application 14/867,328
Technology Center 3600

Before JAMES B. ARPIN, MIRIAM L. QUINN, and ADAM J. PYONIN, *Administrative Patent Judges*.

ARPIN, *Administrative Patent Judge*.

DECISION ON APPEAL

Appellant[1] appeals under 35 U.S.C. § 134(a) from the Examiner's final rejection of claims 1–30, all of the pending claims. Final Act. 2.[2] We have jurisdiction under 35 U.S.C. § 6(b).

We affirm.

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[1] "Appellant" here refers to "applicant" as defined in 37 C.F.R. § 1.42. Appellant identifies the real party-in-interest as Michelle Fisher. Appeal Br. 3.

[2] In this Decision, we refer to Appellant's Supplemental Appeal Brief ("Appeal Br.," filed January 21, 2019) and Reply Brief ("Reply Br.," filed May 24, 2019); the Final Office Action ("Final Act.," mailed September 27, 2018), the Advisory Action ("Adv. Act.," mailed November 26, 2018), and the Examiner's Answer ("Ans.," mailed March 28, 2019); and the originally-filed Specification ("Spec.," filed September 28, 2015). Rather than repeat the Examiner's findings and determinations and Appellant's contentions in their entirety, we refer to these documents.

STATEMENT OF THE CASE

Appellant's claimed methods, systems, and computer-readable media "relate[] to data communications and wireless devices." Spec. ¶ 2. As noted above, claims 1–30 are pending. Claims 1, 10, and 19 are independent. Appeal Br. 63 (claim 1), 64–65 (claim 10), 66 (claim 19) (Claims App.). Claims 2–9 and 21–25 depend directly or indirectly from claim 1, claims 11–18 and 26–30 depend directly or indirectly from claim 10, and claim 20 depends directly from claim 19. *Id.* at 63–68.

Claim 10 recites "[a] remote management server for sending a digital artifact, comprising: a remote management server transceiver . . . ; a remote management server processor . . . ; and a[3] remote management server transceiver," which perform functions, substantially as recited in claim 1. *Id.* at 63, 64–65. Claim 19 recites "[a] non-transitory computer readable medium for sending a digital artifact, comprising: computer code for" performing functions, substantially as recited in claim 6. *Id.* at 64, 66. The Examiner relies on the same findings and arguments in rejecting claims 2–9, 11–18, and 20–30 (Final Act. 2), and Appellant does not contest the rejection of any claim separately from the independent claims (*see* Appeal Br. 34).

Claim 1, with disputed limitations emphasized, is representative.

> 1. A method for sending a digital artifact, comprising:
>
> *receiving at a remote management server a request for the digital artifact from a non-browser based mobile application,*

[3] Claim 10 recites "*a* remote management server transceiver" twice. Appeal Br. 64–65 (Claims App.) (emphasis added). It is not clear whether these are the same or different components. When prosecution resumes, Appellant should clarify the language of this claim.

> *wherein the request is automatically triggered when a user browses a specific non-browser based mobile application generated screen*, the non-browser based mobile application is not browser based with a graphical user interface and is preinstalled or downloaded and installed on a mobile device, the mobile device comprising a mobile device display, a mobile device processor, a mobile device radio interface, and a mobile device wireless fidelity (Wi-Fi) interface, the specific non-browser based mobile application generated screen corresponds to a specific screen, scene, or area of the non-browser based mobile application;
>
> selecting, by the remote management server, the digital artifact based on one or more targeting parameters stored at the remote management server, and
>
> *sending, by the remote management server, the digital artifact from the remote management server to the non-browser based mobile application for a display within the specific non-browser based mobile application generated screen*.

Id. at 63 (emphases added).

REFERENCES AND REJECTIONS

The Examiner relies upon the following references in rejecting the pending claims:

Name[4]	**Number**	**Publ'd/Issued**	**Filed**
Pond	US 2004/0030601 A1	Feb. 12, 2004	Aug. 6, 2003
Barnes	US 8,423,408 B1	Apr. 16, 2013	Apr. 17, 2006

The Examiner rejects claims 1–30 under 35 U.S.C. § 101 as directed to patent-ineligible subject matter. Final Act. 2–6, 14–20. The Examiner rejects claims 1, 2, 4, 6–11, 13, and 15–30 under 35 U.S.C. § 103 as obvious over the teachings of Barnes (*id.* at 6–12) and claims 3, 5, 12, and 14 under

[4] All reference citations are to the first named inventor only.

35 U.S.C. § 103 as obvious over the combined teachings of Barnes and Pond (*id.* at 13).

We review the appealed rejections for error based upon the issues identified by Appellant, and in light of the arguments and evidence produced thereon. *Ex parte Frye*, 94 USPQ2d 1072, 1075 (BPAI 2010) (precedential). Arguments not made are waived. *See* 37 C.F.R. § 41.37(c)(1)(iv). Unless otherwise indicated, we adopt the Examiner's findings in the Final Action and the Answer as our own and add any additional findings of fact for emphasis. For the reasons given below, we affirm the rejection of the pending claims.

ANALYSIS

I. Patent Ineligible Claims

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. Pty. Ltd. 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*. *Alice*, 573 U.S. 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."). According to the Court, 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)).

In *Diamond v. 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." *Diamond v. Diehr*, 450 U.S. 175, 187 (1981). 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.* at 191 (citing *Benson* and *Flook*). Nevertheless, the Court noted that "[i]t 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." *Id.* at 187; *see also BASCOM Glob. Internet Servs., Inc. v. AT&T Mobility LLC*, 827 F.3d 1341, 1352 (Fed. Cir. 2016) (Even if the individual components were known, "an inventive concept can be found in the ordered combination of claim limitations that transform the abstract idea of filtering content into a particular, *practical application* of that abstract idea" (emphasis added).).

If the claim is "directed to" an abstract idea, we next "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. Office Patent Eligibility Guidance

In an effort to achieve clarity and consistency in how the Office applies the Court's two-part framework, the Office published revised guidance on the application of § 101. *2019 Revised Patent Subject Matter Eligibility Guidance*, 84 Fed. Reg. 50 (Jan. 7, 2019).[5] In Step One of our analysis, we look to see whether the claims, as written, fall within one of the four statutory categories identified in § 101. *Id.* at 53 ("Examiners should determine whether a claim satisfies the criteria for subject matter eligibility by evaluating the claim in accordance with the criteria discussed in

[5] "All USPTO personnel are, as a matter of internal agency management, expected to follow the guidance." *2019 Revised Patent Subject Matter Eligibility Guidance*, 84 Fed. Reg. at 51; *see also October 2019 Update: Subject Matter Eligibility*, 1 (Oct. 17, 2019) ("Note, the feedback received was primarily directed to examination procedures and, accordingly, this update focuses on clarifying practice for patent examiners. However, all USPTO personnel are expected to follow the guidance.").

MPEP[6] § 2106, *i.e.*, whether the claim is to a statutory category (Step 1) and the *Alice/Mayo* test for judicial exceptions (Steps 2A and 2B)").

> Under the guidance, we then look to whether the claim recites:
>
> (1) Step 2A – Prong One: 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); and
>
> (2) Step 2A – Prong Two: additional elements that integrate the judicial exception into a practical application (*see* MPEP §§ 2106.05(a)–(c), (e)–(h)).

See 2019 Revised Patent Subject Matter Eligibility Guidance, 84 Fed. Reg. at 54–55 ("Revised Step 2A").

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.

See id. at 56 ("*Step 2B: If the Claim Is Directed to a Judicial Exception, Evaluate Whether the Claim Provides an Inventive Concept*.").

C. Step One – Claims Directed to Statutory Categories

Appellant's independent claim 1 and its associated dependent claims are directed to methods (i.e., a "process"), Appellant's independent claim 10

[6] All Manual of Patent Examining Procedure ("MPEP") citations herein are to MPEP, Rev. 08.2017, January 2018.

and its associated dependent claims are directed to servers (i.e., a "machine"), and Appellant's independent claim 19 and its associated dependent claims are directed to "non-transitory," computer-readable media (i.e., a "manufacture"). Appeal Br. 63–68 (Claims App.); *see In re Nuijten*, 500 F.3d 1346, 1356–57 (Fed. Cir. 2007) (transitory embodiments are not directed to statutory subject matter). Thus, the pending claims are directed to recognized statutory categories.

D. Two-Part Alice/Mayo Analysis

1. Independent Claims 1, 10, and 19

a. Step 2A, Prong One – Claims Recite Abstract Idea

Applying the first part of the *Alice/Mayo* analysis (Step 2A), the Examiner determines the independent claims are "directed to *fundamental economic practices* and *methods of organizing human activities*, and are therefore abstract." Final Act. 3 (emphases added); Ans. 17.[7] For the reasons given below, we agree.

Claim 1 recites a method employing a mobile device, which "compris[es] a mobile device display, a mobile device processor, a mobile device radio interface, and a mobile device wireless fidelity (Wi-Fi) interface" and upon which a non-browser-based mobile application "with a graphical user interface" is installed; and a server. Appeal Br. 63; *see* Spec.

[7] The Board previously determined with respect to claims comprising similar limitations in this application's parent application that "[s]ending targeted advertisements to certain mobile device users based on their characteristics is a method of organizing human activity and/or fundamental economic practice. As such it is an abstract idea." *Ex parte Michelle Fisher and Rathin Guha*, Appeal No. 2015-004370, 7 (March 6, 2017); *see* Ans. 31.

¶ 18, Fig. 1. Claim 1 broadly recites the limitations of (1) receiving a request from the application for a digital artifact,[8] the request automatically triggered when a user browses a specific screen, scene, or area of the application ("receiving . . . a request for the digital artifact from a non-browser based mobile application, wherein the request is automatically triggered when a user browses a specific non-browser based mobile application generated screen, the non-browser based mobile application is not browser based with a graphical user interface and is preinstalled or downloaded and installed on a mobile device . . . , the specific non-browser based mobile application generated screen corresponds to a specific screen, scene, or area of the non-browser based mobile application"); (2) selecting the artifact based on stored targeting parameters[9] ("selecting . . . the digital artifact based on one or more targeting parameters stored at the remote management server"); and (3) sending the artifact for display on a specific, application screen, scene, or area ("sending . . . the digital artifact from the

[8] The Specification discloses, "[digital] artifact[s] can comprise one or more of an *advertisement*, receipt, ticket, coupon, media, or content." Spec. ¶ 5 (emphasis added); *see* Appeal Br. 63 (Claims App.) (Claim 2 depends from claim 1 and recites, "the digital artifact is an advertisement, receipt, ticket, coupon, media, or content.").

[9] The Specification discloses, "one or more target parameters are associated with each artifact - for example, an artifact can have target parameters that correspond to a pageid, zipcode, area, age, gender, occupation, affiliation, and so on." Spec. ¶ 26; *see* Appeal Br. 64 (Claims App.) (Claim 7 depends from claim 1 and recites, "targeting parameters comprises personal information and/or purchase transaction related information." Claim 8 depends from claim 7 and recites, "personal information comprises location, gender, age, interest, affiliation, userid, pageid, zip code, area code, and occupation.").

remote management server to the non-browser based mobile application for a display within the specific non-browser based mobile application generated screen."). Appeal Br. 63 (Claims App.); *see* Final Act. 14–15. Independent claims 10 and 19 recite substantially similar limitations. Appeal Br. 64–65, 66 (Claims App.).

> Referring to Figure 3, the Specification explains:
>
> > The correlation engine 300 can correlate user profile information (e.g., location, gender, age, interest, affiliations, etc.) stored in the user profile database 302 with other data (historical payment transactions, real-time payment transactions, etc.) stored in the artifacts database 304, and/or location of a user to provide more relevant targeting parameters for which to target, identify and distribute relevant artifacts to a user.

Spec. ¶ 21; *see id.* ¶ 23. Thus, we are persuaded that claim 1 recites methods of customizing delivery of artifacts, e.g., advertisements or other content, to a user on a mobile device based on targeting parameters. *See Affinity Labs of Tex., LLC v. Amazon.com Inc.*, 838 F.3d 1266, 1272 (Fed. Cir. 2016) ("[The patent] claims the general concept of streaming user-selected content to a portable device. The addition of basic user customization features to the interface does not alter the abstract nature of the claims and does not add an inventive component that renders the claims patentable."); *Elec. Power Grp., LLC v. Alstom S.A.*, 830 F.3d 1350, 1353 (Fed. Cir. 2016) ("[C]ollecting information, analyzing it, and displaying certain results of the collection and analysis" is not patent eligible); *see also Cellspin Soft, Inc. v. Fitbit, Inc.*, 927 F.3d 1306, 1319 (Fed. Cir. 2019) (citing *Electric Power Grp.* with approval).

Appellant contends that the Examiner's identification of the abstract idea "is overly broad and ignores the limitations of the claims." Appeal

Br. 35–36 (emphasis omitted). Nevertheless, the analysis of claim 1 focuses on the language of claim 1 apart from the recited, generic hardware and software employed in the claimed methods. *See* Adv. Act. 3. Moreover, the claim limitations are considered individually and as an ordered combination, in light of the Specification's disclosure, to identify the recited, abstract idea. *See* Final Act. 14–15. Appellant specifically contends that, like the claims at issue in *Enfish, LLC v. Microsoft Corporation*, 822 F.3d 1327 (Fed. Cir. 2016), the claims here are not directed to an abstract idea. In *Enfish*, the U.S. district court failed to consider the claims recitation of *how* the information was organized using tabular format, as explained in detail in the specification. 822 F.3d at 1337–38. Unlike *Enfish*, claim 1 does not recite in any detail *how* the artifact request is triggered or how the targeting parameters are used to select the artifact sent for display. *See* Ans. 21–23. Thus, we are persuaded that the Examiner has not characterized the claims improperly at a high level of abstraction.

Appellant further contends that the decisions cited by the Examiner in support of the identification of the abstract idea are not analogous to the pending claims. Reply Br. 36–41. Initially, we note that abstract ideas falling within the judicial exceptions to patent eligibility are not limited to those previously identified in Federal Circuit decisions. *See 2019 Revised Patent Subject Matter Eligibility Guidance*, 84 Fed. Reg. at 52. Thus, we view the Examiner's citation to such earlier decisions as exemplary of similar types of patent-ineligible subject matter. *See* Final Act. 3; Adv. Act. 3; Ans. 17, 23–24. We find these decisions identify sufficiently similar abstract ideas to support the Examiner's identification of the abstract idea recited in the pending claims.

Appellant also contends that the pending claims do not recite certain methods of organizing human activities, such as fundamental economic practices and principles. Appeal Br. 42–43. Because, as noted above, artifacts may be "an advertisement, receipt, ticket, coupon, media, or content" (*see, e.g.*, Spec. ¶ 5) targeted to an application user in response to receipt of a request triggered by the user's browsing of the application, we are persuaded that the pending claims recite certain methods of organizing human activity. *See Ultramercial, Inc. v. Hulu, LLC*, 772 F.3d 709, 715 (Fed. Cir. 2014) (holding that claim "describ[ing] only the abstract idea of showing an advertisement before delivering free content" is patent ineligible).

In addition, Applicant contends that

> a digital artifact cannot be requested from a mobile device nor sent to a mobile device without the use of a machine. The automatic nature of the process performed by the programmed computer, and the fact that the Claims do not deal with human decision making or activities negates the alleged "organizing human activity" assertion.

Appeal Br. 42. However, as the Office has explained,

> the sub-groupings [within certain methods of organizing human activity] encompass both activity of a single person (for example, a person following a set of instructions or a person signing a contract online) and activity that involves multiple people (such as a commercial interaction), and thus, *certain activity between a person and a computer* (for example a method of anonymous loan shopping that a person conducts using a mobile phone) may fall within the "certain methods of organizing human activity" grouping. The number of people involved in the activity is not dispositive as to whether a claim limitation falls within this grouping. Instead, the determination should be based on whether the activity itself falls within one of the subgroupings.

October 2019 Update: Subject Matter Eligibility at 5 (emphasis added). Thus, the use of a computer does not prevent a claim from reciting certain methods of organizing human activities.

Claim 1's limitations, under their broadest reasonable interpretation, recite providing customized or targeted commercial content (e.g., advertisements), such that a mobile device user can see the commercial content, which are fundamental economic practices and "commercial . . . interactions (including . . . sales activities or behaviors . . .); [and] manag[e] personal behavior or relationships or interactions between people[, e.g., message providers and mobile device users,] (including . . . following rules or instructions)." Spec. ¶¶ 21–23; *2019 Revised Patent Subject Matter Eligibility Guidance*, 84 Fed. Reg. at 52. Such practices and interactions fall within the broader category of "[c]ertain methods of organizing human activity." *2019 Revised Patent Subject Matter Eligibility Guidance*, 84 Fed. Reg. at 52. Thus, we determine that the rejected claims recite an abstract idea, namely "[c]ertain methods of organizing human activity." *Id.*; Final Act. 3; Ans. 17.

b. Step 2A, Prong Two – Abstract Ideas Not Integrated Into Practical Application

The Examiner finds that the independent claims do not integrate the recited abstract idea into a practical application. Ans. 18–19; *see* Final Act. 4; Adv. Act. 3. In particular, the Examiner finds, and we agree that:

> The claims describe neither a problem nor a solution. The Specification does not identify any business problems that the invention aims to solve. Nor does the Specification point out what technical problem in the realm of digital communication that the invention intends to solve, and why the claimed invention qualifies as a technical solution to a technical problem.

> The claims do not purport to improve the functioning of a computer or effect an improvement in any other technology or technical field. Instead, the claims do not amount to any[thing] significantly more than an instruction to apply the abstract ideas of sending digital artifacts to mobile application screens.[10] The claims are directed to marketing and communication and not solving technical problems. The focus of the claims is not on any improvement in computers as tools, but on abstract ideas that use mobile devices as tools. Stating an abstract idea while adding the words 'apply it between a remote server and a mobile device' is not enough for patent eligibility.

Ans. 18; *see* Final Act. 4; Adv. Act. 3.

Appellant contends that the claims integrate the identified abstract idea into a practical application for at least three reasons. Reply Br. 23–30. For the reasons given below, we disagree with Appellant's contention.

First, Appellant contends that the claims are limited to a "non-browser based application [that] is a mobile operating system platform non-browser based application with a graphical user interface that is preinstalled or downloaded and installed on the mobile communications device, wherein the graphical user interface includes a graphical icon." Reply Br. 23. Thus, Appellant contends that the claims implement or use the identified abstract idea "in conjunction with, a particular machine or manufacture that is integral to the claim." *Id.* (citing MPEP § 2106.05(b)).

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[10] We acknowledge that some of the considerations at Step 2A, Prong Two, properly may be evaluated under the second part of *Alice/Mayo* analysis (Step 2B of the Office's guidance). For purposes of maintaining consistent treatment within the Office, we evaluate those considerations under first part of the *Alice/Mayo* analysis (Step 2A of the Office's guidance). *See 2019 Revised Patent Subject Matter Eligibility Guidance*, 84 Fed. Reg. at 55 nn.25, 27–32.

Initially, we note that the pending claims do not recite, "the graphical user interface includes a graphical icon." Appeal Br. 63–68. In the Rule 131 Affidavit ("131 Aff."), filed October 19, 2018, Appellant alleges that the "non-browser based application" recitation is supported in Patent Application Publication No. US 2008/0052192 A1, which is a publication of U.S. Patent Application No. 11/933,351. 131 Aff. 8 (citing in Patent Application Publication No. US 2008/0052192 A1, ¶ 35); *see* Spec. ¶ 3; *see also* MPEP § 608.01(p)(I)(A) (discussing 37 C.F.R. § 1.57(d)). Nevertheless, the Specification describes the recited methods as applying to applications broadly and does not differentiate between browser and non-browser applications in the functioning of the disclosed methods. *See* Spec. ¶ 28 ("In operation, a user opens an application ([e.g.], a web-browser) on a computing device (a mobile communication device). The application queries the management Server for an artifact, providing pageId (scene identifier) and userId, where the pageId can represent a specific screen, scene or real-estate property. The query can be initiated/triggered via following mechanisms, but not limited to: Browsing a particular screen/web-page that specify unique real-estate; leveraging proximity services (NFC/Contactless, etc.) that specify unique code or identifier; geographic location (LBS, Bluetooth, etc.)."); *see also id.* ¶¶ 4–6 (discussing "applications" generally). Moreover, Appellant fails to show where the Specification discloses expressly the use of a "graphical user interface" or a "graphical icon." Consequently, we are not persuaded that the cited claim language demonstrates that the claimed method implements or uses the recited abstract idea in conjunction with, a particular machine or manufacture that is integral to the claim.

Second, Appellant contends that the independent claims recite an improvement in the functioning of the computer or another technology or technical field that integrates the identified abstract idea into a practical application. Reply Br. 24–29. In particular, Appellant contends the claims recite providing "*relevant* digital artifacts," which solves a business problem thereby improving the computer and the field of sending artifacts (*id.* at 25 (emphasis added)), and the delivery of the artifacts to a non-browser application "result[s] in faster processing, less [central processing unit (CPU)] utilization, less memory utilization, improved reliability, and security unlike the prior art which teach use of SMS and/or a web browser which is slow, unreliable, and costly" (*id.* at 27). Nevertheless, although the Specification recites that "relevant" digital artifacts may be identified and distributed, the claims do not recite that only "relevant" digital artifacts are requested, selected, or sent for display. *See* Appeal Br. 63–68 (Claims App.); Spec. ¶¶ 19, 21, 23, 24; *cf.* Barnes, 6:24–27 ("The analytic engine 124 is the 'brain' of the Advertisement Fulfillment System 102. The analytic engine 124 contains the data and intelligence to enable planning and execution of campaigns that meet the requirements needed to target highly relevant advertisements to subscribers."). Moreover, the claims do not recite how the method achieves faster processing, less CPU utilization and memory utilization, improved reliability, and security; and we do not find an explanation of how these advantages are achieved in the Specification.[11] *See*

11

> It is well settled . . . that automating conventional activities using generic technology does not amount to an inventive concept. *See Alice*, 134 S.Ct. at 2358 (explaining that "if a patent's recitation of a computer amounts to a mere instruction to implement an

Final Act. 16 ("Regarding reliability, security and flexibility, Examiner first notes that none of these features have been recited in the claims and hence Applicant's arguments are inapplicable to the current set of claims."); Ans. 27 ("[W]ith regard to assertions of reliability, flexibility, performance, user experience, etc., Examiner notes that none of the above terms have been recited in the appealed claims and therefore they have no relevance to the present appeal. In the case of reliability, Appellant merely repeats previous arguments of online mode and retransmitting tickets - which, as pointed out above, are inherent properties of digital communication."); *see also Am. Axle & Mfg., Inc. v. Neapco Holdings LLC*, 939 F.3d 1355, 1363 (Fed. Cir. 2019) ("We have repeatedly held that features that are not claimed are irrelevant as to step 1 or step 2 of the *Mayo*/*Alice* analysis."). Thus, we are not persuaded by Appellant's contentions.

Third, Appellant contends that the claim limitations apply or use the identified abstract idea "in some other meaningful way beyond generally linking the use of the judicial exception to a particular technological

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> abstract idea on ... a computer, that addition cannot impart patent eligibility") (internal alteration, citation, and quotations omitted); *Intellectual Ventures* [*I LLC v. Capital One Bank (USA)*], 792 F.3d [1363,] 1367 [(Fed. Cir. 2015)] ("claiming the *improved speed or efficiency* inherent with applying the abstract idea on a computer [does not] provide a sufficient inventive concept"); *Bancorp Servs., L.L.C. v. Sun Life Assur. 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.").

LendingTree, LLC v. Zillow, Inc., 656 F. App'x 991, 996 (Fed. Cir. 2016) (emphases added).

environment, such that the claim as a whole is more than a drafting effort designed to monopolize the exception." Reply Br. 29 (emphasis omitted). Nevertheless, Appellant acknowledges that the "***[c]laims are limited to a specific technical environment***." Appeal Br. 37. Although Appellant contends that the claims recite "***an unconventional ordered combination unlike the prior art***," the contention conflates the novelty and obviousness analyses with the eligibility analysis. The claims merely recite generic hardware and software components performing their known functions in a logical order, namely, receiving a request for an artifact, selecting the artifact according to predetermined parameters in response to that request, and sending the selected artifact for display. *See* Ans. 22 ("The claimed features of receiving digital content, selecting digital content and sending digital content from a server to a client device are focused on using computers and networks expressly what they were designed for."). Consequently, taken individually or as an ordered combination, the claim limitations recite an abstract idea, and the computer technology recited in the claims is generic and merely serves to tie the abstract idea to a technological environment.

Finally, Appellant contends that, in view of the Office's hypothetical Example 37 (claim 2); we should find that the claimed methods, servers, and computer-readable media recite the integration of the identified abstract idea into a practical application. Appeal Br. 55; Reply Br. 33. Initially, we note, "[t]he Board decides cases in accordance with the law, not in accordance with hypothetical 'examples [] intended to be illustrative only.'" *Ex parte Blythe*, Appeal No. 2017-003176, 2018 WL 3047568, at *8 (PTAB May 31, 2018) (nonprecedential); *see also 2019 Revised Patent Subject Matter*

Eligibility Guidance, 84 Fed. Reg. at 52, n. 11 ("[T]he finding that the subject matter claimed in a prior patent was 'abstract' as claimed may not determine whether similar subject matter in another application, claimed somewhat differently or supported by a different disclosure, is directed to an abstract idea and therefore patent ineligible.") (emphasis omitted). Example 37, like the other examples provided by the Office, is merely a "hypothetical [that is] only intended to be illustrative of the claim analysis under the 2019 [Patent Eligibility Guidance]." *Subject Matter Eligibility Examples: Abstract Ideas*, 1 (Jan. 7, 2019). Nevertheless, we note that claim 2 of Example 37 recites *how* the determination of the amount of use of each icon is made. *Subject Matter Eligibility Examples: Abstract Ideas* at 3. The pending independent claims do not recite *how* the targeted parameters are applied to select the sent artifact. *See, e.g.*, Appeal Br. 63 (Claims App.). Therefore, we do not find Appellant's contentions based on this example persuasive.

In view of Appellant's claim recitations and Specification and consistent with the Examiner's determinations, we are persuaded the rejected claims do not recite:

(i) an improvement to the functioning of a computer;
(ii) an improvement to another technology or technical field;
(iii) an application of the abstract idea with, or by use of, a particular machine;
(iv) a transformation or reduction of a particular article to a different state or thing; or
(v) other meaningful limitations beyond generally linking the use of the abstract idea to a particular technological environment.

See MPEP §§ 2106.05(a)–(c), (e)–(h). Thus, we conclude that the rejected independent claims do not integrate the recited abstract idea into a practical application and that the claims are directed to an abstract idea.

c. Step 2B – Not Significantly More Than the Abstract Idea

Because we find that the claims are directed to an abstract idea and do not integrate that abstract idea into a practical application, we now consider whether the claims include additional limitations, such that the claims amount to significantly more than the abstract idea. Applying the second part of the *Alice/Mayo* analysis, the Examiner finds that, with respect to the independent claims, the steps of receiving a request for an artifact, selecting the artifact according to predetermined parameters in response to that request, and sending the selected artifact for display have been recognized as well-understood, routine, and conventional computer functions. Ans. 19 (citing MPEP § 2106.05(d)).

Moreover, the Examiner finds the Specification's Figures disclose that the hardware and software components of the claimed methods, servers, and computer-readable media also are well-understood, routine, and conventional. Ans. 19–20. In particular, the Examiner finds that Figures 1, 3, and 9 disclose generic servers; Figure 1 discloses generic point-of-sale devices; Figure 2 discloses generic mobile communication devices (*see, e.g.*, Spec. ¶ 5 ("The mobile communication device can be a cellular phone or a wireless personal digital assistant (PDA).")); Figure 9 discloses generic computing devices (*see, e.g.*, Spec. ¶ 28 ("In operation, a user opens an application ([e.g.], a web-browser) on a computing device (a mobile communication device).")); and Figures 5 and 6 disclose flowcharts describing the conventional steps of updating user targeting parameters and

sending artifacts to users based on target parameters. Ans. 19–20; *see* Final Act. 5. Further, the Examiner explains that the Specification describes the hardware and software components at the highest level of generality. Ans. 20. The Examiner concludes, and we agree, that these descriptions satisfy the requirements set forth in *Berkheimer v. HP Inc.*, 881 F.3d 1360 (Fed. Cir. 2018), to show that the components are well-understood, routine, and conventional. *Id.* at 21; *see* Reply Br. 33–34.

Appellant contends that, when considered as an ordered combination, the recited steps disclose significantly more than the identified abstract idea. Reply Br. 31–32 (citing *BASCOM*, 827 F.3d at 1352). Nevertheless, Appellant fails to explain adequately what about the combination of these steps renders them more than the identified abstract idea. *Id.* Thus, we are not persuaded that the order of the recited steps renders them significantly more than the identified abstract idea. Adv. Act. 3; *see* Final Act. 5.

Claims 1, 10, and 19 recite generic computer components performing generic computer and software functions, which, considered individually or as an ordered combination, are well-understood, routine, and conventional; and these claims do not recite "significantly more" than the identified abstract idea. Final Act. 4–6; Ans. 19–21. On this record, we agree with the Examiner that independent claims 1, 10, and 19 are directed to an abstract idea and fail to recite significantly more than the identified abstract idea. Thus, we are not persuaded that the Examiner erred in determining that these claims are patent ineligible, and we sustain that rejection.

2. Dependent Claims 2–9, 11–18, and 20–30

The Examiner determines that dependent claims 2–9, 11–18, and 20–30 also are directed to an abstract idea and fail to recite significantly more

than the identified abstract idea. *See* Final Act. 2. Appellant does not challenge the patent ineligibility rejection of any dependent claim separately from its base claim. Appeal Br. 34. Therefore, on this record and for the reasons given above, we also sustain the patent ineligibility rejection of the dependent claims.

II. Obviousness Over Barnes, Alone or in Combination with Pond

A. Independent Claims 1, 10, and 19

As noted above, the Examiner rejects independent claims 1, 10, and 19 as obvious over the teachings of Barnes. Final Act. 6–8. With respect to claim 1, the Examiner determines that Barnes teaches or suggests all of the limitations, as recited in claim 1. *Id.* at 7. In addition, the Examiner finds, "[i]t would have been obvious to send an advertisement graphic when a user opens a gaming application on his/her mobile device." *Id.* at 8; *see* Barnes, 1:31–36, 12:5–11. The Examiner further finds, "[c]laims 10, 19 are substantially similar to claim 1 and hence rejected on similar grounds." *Id.* For the reasons given below, we disagree.

In particular, the Examiner finds that Barnes teaches

> receiving at a remote management server a request for the digital artifact from a non-browser based mobile application, wherein the request is automatically triggered when a user browses a specific non-browser based mobile application generated screen, the non-browser based mobile application is not browser based with a graphical user interface and is a preinstalled or downloaded and installed on the mobile device, the mobile device comprising a mobile device display, a mobile device processor, a mobile device radio interface, and a mobile device wireless fidelity (Wi-Fi) interface, the specific non-browser based mobile application generated screen corresponds

> to a specific screen, scene, or area of the non-browser based mobile application,

as recited in claim 1. *Id.* at 7 (citing Barnes, Figs. 2–5, 11:50–60, 13:30–40, 13:45–55, 13:60–65, 14:15–30). Barnes's Figure 3 is reproduced below.

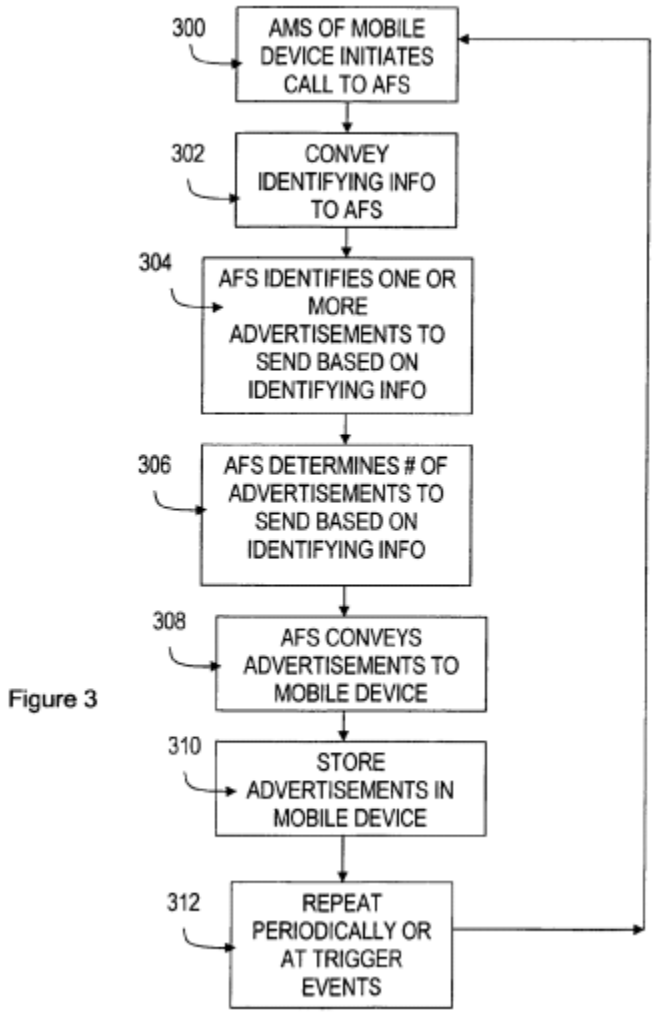

Figure 3

Figure 3 "is a logic flow diagram of a method for adding dynamic advertising content according to various embodiments of [Barnes's] disclosure." Barnes, 2:32–34. Referring to Figure 3, Barnes's Advertisement Management System (AMS) resides on a mobile device and "from time to time initiates a call to the Advertisement Fulfillment System [(AFS)] 102." *Id.* at 12:49–53 (step 300). Barnes explains, "[i]n response to

the call, the Advertisement Fulfillment System 102 (and more specifically, the delivery agent/advertisement server 126) will identify one or more advertisements to send to the mobile device 104 to store in the Advertisements Store 202 based on identifying information and currently executing campaigns (block 304)." *Id.* at 13:1–6. Thus, referring to step 310 of Figure 3, selected advertisements are sent by the Advertisement Fulfillment System for storage on the mobile device in the Advertisements Store. *Id.* at 13:32–40.

Barnes's Figure 4 is reproduced below.

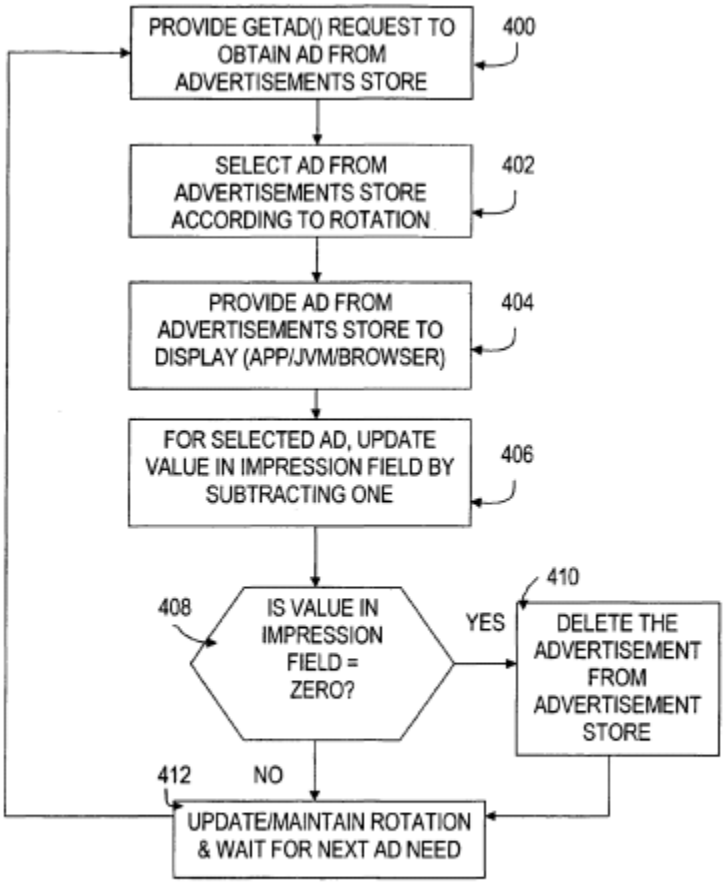

Figure 4

Figure 4 "is a logic flow diagram of a method for rotating and placement of

advertising content according to various embodiments of the present disclosure." *Id.* at 2:35–37. With respect to Figure 4, Barnes explains:

> As shown in FIG. 3, at certain times the Advertisement Management System 204 provides a "getAd( )" Application Programming Interface ("API") call for one of the [multimedia player and downloaded JAVA 2 Micro Edition "J2ME" applications (J2ME apps)] 206, the [JAVA Virtual Machine (JVM)] 208, *or* the Browser 210 on the device to use in order to obtain an advertisement from the Advertisements Store 202 (block 400). Each application determines when to have the getAd API call provided based on the logic embedded in the JAVA code for the particular application.

Id. at 13:47–55 (emphasis added). Thus, the Examiner finds that Barnes's Advertisement Fulfillment System teaches the recited "remote management server," and Barnes's Advertisement Management System working with the J2ME apps or JVM teaches the recited "non-browser based mobile application." *See* Final Act. 7; Adv. Act. 1; Ans. 9.

Further, Barnes discloses, "in an application for a race car game, an advertisement may be displayed in a road sign graphic in the game or at the bottom of a game where white space is available next to the score, the timer, etc." Barnes, 12:11–14. Thus, the Examiner finds Barnes teaches or suggests "the request is automatically triggered *when a user browses a specific non-browser based mobile application generated screen*, the non-browser based mobile application is not browser based with a graphical user interface and is a preinstalled or downloaded and installed on a mobile device," as recited in claim 1. Ans. 13–14; Appeal Br. 63 (Claims App.) (emphasis added).

Appellant contends

> because [Barnes's] requires different steps and many more steps including the AMS call transmitting the device identifier to the

> server, selecting advertisements at the server based on the device identifier, downloading advertisements to the mobile store on the mobile device, the AMS providing the GetAD API to the game/J2ME/JVM/Browser, and then the game/J2ME/JVM/Browser selecting an advertisement from the mobile store on the mobile device, ***it is not only a different invention, but it is more time consuming and requires more CPU processing and memory.***
>
> In contrast, Applicant's invention ***automatically sends the request for the digital artifact when the user browses the screen,*** selects the digital artifact, and then downloads the digital artifact as reflected by independent claims which recite in part,
>
> "receiving at a remote management server a request for the digital artifact from a non-browser based mobile application, ***wherein the request is automatically triggered when a user browses a specific non-browser based mobile application generated screen***[.]"

Reply Br. 5. Further, Appellant contends:

> To avoid latency problems in column 14, line 10-16 relied upon by the Examiner that he J2ME/JVM/Browser which is a second and different applications ***requests an advertisement from the mobile store on the mobile device not the Advertisement Fulfillment System (Examiner alleges is "remote management server")*** using a 3rd application- the get AD( ) call API to requests the advertisement and ***AFTER*** the Advertisement Fulfillment System (Examiner alleges is "remote management server") sends advertisements to the mobile device.

Appeal Br. 10; *see* Reply Br. 7. Thus, like the method recited in claim 1, Barnes discloses that a non-browser application may send a request for advertisements using a getAd( ) API provided by the Advertisement Management System. *See* Barnes, 13:47–53. However, unlike the method recited in claim 1, the advertisements are not "[sent], by the remote management server, . . . from the remote management server to the non-browser based mobile application," instead the advertisements are sent to the

Advertisements Store. *See id.* at 13:20–23, 13:32–40, Figs. 2 (Advertisements Store 202), 4 (steps 400, 402, 404); Appeal Br. 63 (Claims App.).

Barnes explains:

> With each successive getAd( ) request, the Advertisement Management System 204 provides the next advertisement in succession (in a round robin fashion, randomly or according to other sequencing approaches known to those of skill in the art) when multiple advertisements are present in the Advertisements Store 202. In this fashion, the multiple advertisements are rotated over time.
>
> In various embodiments, if only one advertisement is present in the Advertisements Store 202, it is the default advertisement and is returned for each getAd( ) request until additional advertisements are stored in the Advertisements Store 202.

Barnes, 14:38–49. Thus, Appellant contends Barnes discloses delivering advertisements *to the Advertisements Store* and delivering advertisements to the non-browser application *from the Advertisements Store*. Appeal Br. 10; Reply Br. 5, 7. This is different from what is recited in claim 1.

The Examiner appears to recognize this difference. *See* Ans. 12. Nevertheless, the Examiner states:

> The reason for the remote server in Barnes is to serve ads to each individual user based on location, browsing etc. If Barnes only relied on serving ads from the mobile device then there would not be any need for the Ad Fulfillment Server and getAd() request call. But an advertiser cannot reside on each and every user's mobile device. Any advertisement will necessarily have to be delivered from an external server such as the Ad Fulfillment System of Barnes. The rotating ads merely fill up time until a new ad is delivered from the Ad Fulfillment Server in response to the getAd() request.

Id. at 13. This misunderstands the operation of Barnes's systems, as depicted in Figure 2, which is reproduced below.

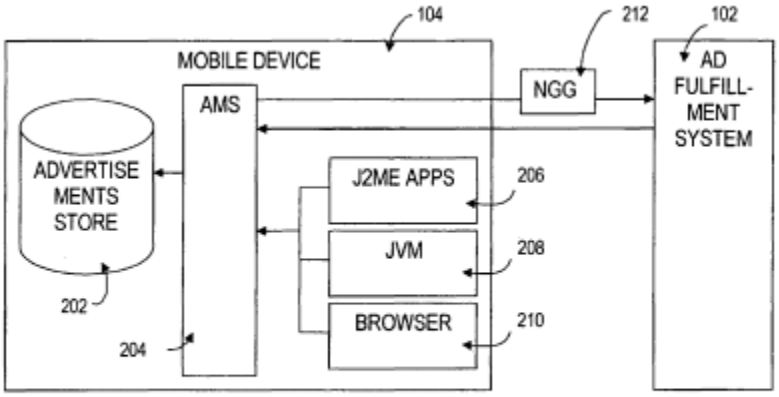

FIGURE 2

Figure 2 "is a more detailed block diagram of the mobile device of the system of FIG. 1A according to various embodiments of the [Barnes's] disclosure." Barnes, 2:29–31. Figure 2 depicts that the Advertisement Management System sends a request for advertisements from a non-browser application to the Advertisement Fulfillment Server, and the Advertisement Fulfillment Server returns advertisements to the Advertisements Store via the Advertisement Management System. *Id.* at 14:16–42. Barnes then discloses that advertisements may be sent to a non-browser application, such as a game, *from the Advertisements Store*. *Id.* Thus, we are not persuaded that the Examiner has shown that Barnes teaches or suggests all of the limitations of claim 1, as well as those of claims 10 and 19.

Consequently, we are persuaded that the Examiner erred in rejecting claims 1, 10, and 19 as rendered obvious over the teachings of Barnes; and we do not sustain the rejection of those claims.

B. Dependent Claims 2–9, 11–19, and 20–30

The Examiner determines that dependent claims 2–9, 11–19, and 20–30 are rendered obvious over the teachings of Barnes, alone or in combination with the teachings of Pond. *See* Final Act. 6–13. Appellant does not challenge the obviousness rejections of any dependent claim separately from its base claim. *Id.* Therefore, on this record and for the reasons given above, we also do not sustain the obviousness rejections of the dependent claims.

DECISIONS

1. The Examiner did not err in rejecting claims 1–30 under 35 U.S.C. § 101, as directed to patent-ineligible subject matter.
2. The Examiner erred in rejecting:
   a. claims 1, 2, 4, 6–11, 13, and 15–30 under 35 U.S.C. § 103 as obvious over the teachings of Barnes and
   b. claims 3, 5, 12, and 14 under 35 U.S.C. § 103, as obvious over the combined teachings of Barnes and Pond.
3. Thus, on this record, claims 1–30 are not patentable.

CONCLUSION

Because we affirm at least one rejection of each claim, we affirm the rejection of claims 1–30.

In summary:

Claims Rejected	35 U.S.C. §	Basis/Reference(s)	Affirmed	Reversed
1–30	101	Eligibility	1–30	
1, 2, 4, 6–11, 13, 15–30	103	Barnes		1, 2, 4, 6–11, 13, 15–30
3, 5, 12, 14	103	Barnes, Pond		3, 5, 12, 14
Overall Outcome			1–30	

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

AFFIRMED