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UNITED STATES PATENT AND TRADEMARK OFFICE

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BEFORE THE PATENT TRIAL AND APPEAL BOARD

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*Ex parte* DANIEL J. YATES and ALEXANDER D. LASKEY

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Appeal 2018-002575  
Application 12/009,639  
Technology Center 3600

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Before MURRIEL E. CRAWFORD, NINA L. MEDLOCK, and  
ROBERT J. SILVERMAN, *Administrative Patent Judges*.

MEDLOCK, *Administrative Patent Judge*.

DECISION ON APPEAL

STATEMENT OF THE CASE

Appellant<sup>1</sup> appeals under 35 U.S.C. § 134(a) from the Examiner's final rejection of claims 26–28, 30–35, 37–39, 41, 44, 46–50, 52, 57, and 58. We have jurisdiction under 35 U.S.C. § 6(b).

We AFFIRM.

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<sup>1</sup> 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 July 18, 2017) and Reply Brief (“Reply Br.,” filed January 12, 2018), and the Examiner's Answer (“Ans.,” mailed November 14, 2017), Advisory Action (“Adv. Act.,” mailed April 14, 2017), and Final Office Action (“Final Act.,” mailed March 2, 2017). Appellant identifies the real party in interest as Oracle International Corporation. Appeal Br. 2.

## CLAIMED INVENTION

Appellant's claimed invention relates to targeted communication to resource consumers (Spec., Title).

Claims 26, 44, and 57 are the independent claims on appeal.

Claim 26, reproduced below with bracketed notations added, is illustrative of the claimed subject matter:

26. A computerized method performed by a resource reporting server including at least a processor for suggesting actions to reduce a usage of a resource by a consumer, the method comprising:

[(a)] retrieving, by the resource reporting server, resource usage data associated with the consumer from a consumer resource database;

[(b)] determining, by the processor, a plurality of reference consumers based at least in part on a statistic factor that is in common between the consumer and the plurality of reference consumers;

[(c)] retrieving, by the processor via a network, respective resource usage data from at least one of a housing database, a billing database and a financial database associated with each of the plurality of reference consumers;

[(d)] determining, by the processor based at least in part on the respective resource usage data and the resource usage data, at least one resource account attribute associated with each of the plurality of reference consumers, wherein a respective value of the at least one resource attribute is lower than a value of the at least one resource attribute associated with the consumer;

[(e)] generating, by the processor, one or more messages associated with the at least one resource account attribute, the one or more messages providing information to reduce the value of the at least one resource attribute associated with the consumer;

[(f)] assigning, by the processor using a global message prioritization engine associated with the resource reporting server, a respective priority to the one or more messages;

[(g)] sending, by the processor via the network based at least in part on the respective priority, a first message of the one or more messages to the consumer via an electronic resource bill;

[(h)] retrieving, by the processor via the network, feedback data of participation feedback of usage indicating action or inaction taken by the consumer in response to receiving the first message;

[(i)] adjusting, by the processor, the respective priority to create an adjusted priority based upon the feedback data; and

[(j)] selectively sending, by the processor via the network, a second message, providing information about how to reduce usage of a resource attribute, over a computer network to a second consumer based upon a priority of the second message being greater than the adjusted priority of the first message, wherein the second message is sent to the second consumer without sending the first message to the second consumer.

## REJECTION<sup>2</sup>

Claims 26–28, 30–35, 37–39, 41, 44, 46–50, 52, 57, and 58 are rejected under 35 U.S.C. § 101 as directed to a judicial exception without significantly more.

## ANALYSIS

Appellant argues the pending claims as a group (Appeal Br. 7–16). We select independent claim 26 as representative. The remaining claims stand or fall with claim 26. *See* 37 C.F.R. § 41.37(c)(1)(iv).

Under 35 U.S.C. § 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. The Supreme Court, however, has long interpreted § 101 to include an implicit exception: “[l]aws of nature, natural phenomena, and

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<sup>2</sup> The rejection under 35 U.S.C. § 112, second paragraph, has been withdrawn. Adv. Act. 2

abstract ideas” are not patentable. *Alice Corp. v. CLS Bank Int’l*, 573 U.S. 208, 216 (2014).

The Supreme Court, in *Alice*, reiterated the two-step framework previously set forth in *Mayo Collaborative Services v. Prometheus Laboratories, Inc.*, 566 U.S. 66 (2012), “for distinguishing patents that claim laws of nature, natural phenomena, and abstract ideas from those that claim patent-eligible applications of those concepts.” *Alice Corp.*, 573 U.S. at 217. The first step in that analysis is to “determine whether the claims at issue are directed to one of those patent-ineligible concepts.” *Id.* If the claims are not directed to a patent-ineligible concept, e.g., an abstract idea, the inquiry ends. Otherwise, the inquiry proceeds to the second step where the elements of the claims are considered “individually and ‘as an ordered combination’” to determine whether there are additional elements that “‘transform the nature of the claim’ into a patent-eligible application.” *Id.* (quoting *Mayo*, 566 U.S. at 79, 78). This is “a search for an ‘inventive concept’ — *i.e.*, an element or combination of elements that is ‘sufficient to ensure that the patent in practice amounts to significantly more than a patent upon the [ineligible concept] itself.’” *Id.* at 217–18 (alteration in original).

In rejecting the pending claims under 35 U.S.C. § 101, the Examiner determined that the claims are directed to “retrieving resource usage data, analyzing resource usage data with respect to a consumer and an identified plurality of reference consumers to determine common consumers and attributes, and sending the results of the analysis to the consumer in the form of a message providing information to reduce the value of the attribute” — a concept that the Examiner concluded is an abstract idea similar to other concepts that the courts have held abstract (Final Act. 5–7). The Examiner

also determined that the claims do not include additional elements that are sufficient to amount to significantly more than the judicial exception (*id.* at 7–8).

After Appellant’s briefs were filed, and the Examiner’s Answer mailed, the U.S. Patent and Trademark Office (the “USPTO”) published revised guidance on January 7, 2019 for use by USPTO personnel in evaluating subject matter eligibility under 35 U.S.C. § 101. 2019 REVISED PATENT SUBJECT MATTER ELIGIBILITY GUIDANCE, 84 Fed. Reg. 50, 57 (Jan. 7, 2019) (the “2019 Revised Guidance”). That guidance revised the USPTO’s examination procedure with respect to the first step of the *Mayo/Alice* framework by (1) “[p]roviding groupings of subject matter that [are] . . . considered an abstract idea”; and (2) clarifying that a claim is not “directed to” a judicial exception if the judicial exception is integrated into a practical application of that exception. *Id.* at 50. The 2019 Revised Guidance, by its terms, applies to all applications, and to all patents resulting from applications, filed before, on, or after January 7, 2019. *Id.*<sup>3</sup>

*Step One of the Mayo/Alice Framework (2019 Revised Guidance, Step 2A)*

The first step in the *Mayo/Alice* framework, as mentioned above, is to determine whether the claims at issue are “directed to” a patent-ineligible

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<sup>3</sup> The 2019 Revised Guidance supersedes MANUAL OF PATENT EXAMINING PROCEDURE (“MPEP”) § 2106.04(II) and also supersedes all versions of the USPTO’s “Eligibility Quick Reference Sheet Identifying Abstract Ideas.” *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.”). Accordingly, Appellant’s arguments challenging the sufficiency of the Examiner’s rejection will not be addressed to the extent those arguments are based on currently superseded USPTO guidance.

concept, e.g., an abstract idea. *Alice Corp.*, 573 U.S. at 217. This first step, as set forth in the 2019 Revised Guidance (i.e., Step 2A), is a two-prong test; in Step 2A, Prong One, we look to whether the claim recites a judicial exception, e.g., one of the following three groupings of abstract ideas: (1) mathematical concepts; (2) certain methods of organizing human activity, e.g., fundamental economic principles or practices, commercial or legal interactions; and (3) mental processes. 2019 Revised Guidance, 84 Fed. Reg. at 54. If so, we next consider whether the claim includes additional elements, beyond the judicial exception, that “integrate the [judicial] exception into a practical application,” i.e., that apply, rely on, or use 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 (“Step 2A, Prong Two”). *Id.* at 54–55. Only if the claim (1) recites a judicial exception and (2) does not integrate that exception into a practical application do we conclude that the claim is “directed to” the judicial exception, e.g., an abstract idea.

We are not persuaded by Appellant’s arguments that the Examiner erred in determining that claim 26 is directed to an abstract idea (Appeal Br. 7–13). 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. Here, the Specification, including the claim language, makes clear that the claims focus on an abstract idea, and not on any improvement to computer technology and/or functionality.

The Specification is entitled “TARGETED COMMUNICATION TO RESOURCE CONSUMERS,” and notes, in the Background section, that persuading consumers to moderate their consumption of resources is useful “to reduce the waste of said resources, to reduce overall or peak demand of said resources, to make efficient use of money, and to preserve the planet’s natural environment” (Spec. ¶ 2). The Specification describes that resource distribution companies, e.g., utilities, traditionally have included reports in resource bills that attempt to persuade consumers to moderate their consumption based on a comparison with the same resource billing account in a different year or with different resource accounts based on geography, e.g., comparing the consumer’s resource consumption to the average consumption in his or her area code (*id.*); however, according to the Specification, typically the same message has been sent to all users of the resource in a single geographic and/or service area (*id.* ¶ 3). The claimed invention is ostensibly intended to improve on these communications by comparing a consumer’s usage of a resource to a relevant cohort’s usage of that same resource, and forwarding a targeted communication to the consumer based on the comparison (*id.*, Abstract).

Consistent with this disclosure, claim 26 recites a method for “suggesting actions to reduce a usage of a resource by a consumer” comprising: (1) collecting the consumer’s resource usage data, i.e., “retrieving, by the resource reporting server, resource usage data associated with the consumer from a consumer resource database” (step (a));

(2) determining a relevant cohort of consumers, i.e., “determining, by the processor, a plurality of reference consumers based at least in part on a statistic factor that is in common between the consumer and the plurality of reference consumers” (step (b)); (3) comparing the consumer’s usage of the resource to the cohort’s usage of that resource, i.e.,

retrieving, by the processor via a network, respective resource usage data from at least one of a housing database, a billing database and a financial database associated with each of the plurality of reference consumers; [and]

determining, by the processor based at least in part on the respective resource usage data and the resource usage data, at least one resource account attribute associated with each of the plurality of reference consumers, wherein a respective value of the at least one resource attribute is lower than a value of the at least one resource attribute associated with the consumer

(steps (c) and (d)); (4) communicating, via a first message, the comparison to the consumer, i.e.,

generating, by the processor, one or more messages associated with the at least one resource account attribute, the one or more messages providing information to reduce the value of the at least one resource attribute associated with the consumer; [and]

assigning, by the processor using a global message prioritization engine associated with the resource reporting server, a respective priority to the one or more messages; [and]

sending, by the processor via the network based at least in part on the respective priority, a first message of the one or more messages to the consumer via an electronic resource bill

(steps (e), (f), and (g)); (5) receiving feedback, indicating action or inaction taken by the consumer, i.e., “retrieving, by the processor via the network, feedback data of participation feedback of usage indicating action or inaction taken by the consumer in response to receiving the first message”

(step (h)); and (6) forwarding a second message to a second consumer based on the received feedback, i.e.,

adjusting, by the processor, the respective priority to create an adjusted priority based upon the feedback data; and selectively sending, by the processor via the network, a second message, providing information about how to reduce usage of a resource attribute, over a computer network to a second consumer based upon a priority of the second message being greater than the adjusted priority of the first message, wherein the second message is sent to the second consumer without sending the first message to the second consumer.

(steps (i) and (j)). These limitations, when given their broadest reasonable interpretation, recite communicating resource conservation messages to a consumer by: (1) collecting information, i.e., resource usage data associated with a consumer and a relevant cohort of consumers; (2) analyzing the information, i.e., comparing the consumer's usage of the resource to the cohort's usage; (3) reporting the results of the collection and analysis, i.e., communicating, via a first message, the comparison to the consumer to, thereby, persuade the consumer to reduce her resource usage; (4) collecting and analyzing further information, i.e., feedback regarding action or inaction taken by the consumer in response to the first message; and (5) reporting the results of the further collection and analysis, i.e., sending a second message to a second consumer based on the analyzed feedback. Simply put, claim 26 recites a targeted direct marketing technique employed by a resource provider to persuade a consumer to reduce his or her resource consumption, i.e., a commercial interaction, which is a method of organizing human activity and, therefore, an abstract idea. *See* 2019 Revised Guidance, 84 Fed. Reg. at 52.

The Federal Circuit has held similar concepts to be abstract. Thus, for example, the Federal Circuit has held that abstract ideas include the concepts of collecting data, analyzing the data, and reporting the results of the collection and analysis, including when limited to particular content. *See, e.g., Intellectual Ventures I LLC v. Capital One Fin. Corp.*, 850 F.3d 1332, 1340 (Fed. Cir. 2017) (identifying the abstract idea of collecting, displaying, and manipulating data); *Elec. Power Grp., LLC v. Alstom S.A.*, 830 F.3d 1350, 1354 (Fed. Cir. 2016) (characterizing collecting information, analyzing information by steps people go through in their minds, or by mathematical algorithms, and presenting the results of collecting and analyzing information, without more, as matters within the realm of abstract ideas); *see also SAP Am., Inc. v. InvestPic, LLC*, 898 F.3d 1161, 1168 (Fed. Cir. 2018) (“As many cases make clear, even if a process of collecting and analyzing information is ‘limited to particular content’ or a particular ‘source,’ that limitation does not make the collection and analysis other than abstract.”) (quoting *Elec. Power Grp.*, 830 F.3d at 1353, 1355 (citing cases))). Targeting customers with particular targeted marketing material also is a longstanding marketing and advertising practice, *see Tuxis Techs., LLC v. Amazon.com, Inc.*, No. CV 13-1771-RGA, 2014 WL 4382446, at \*5 (D. Del. Sept. 3, 2014) (Matching consumers with a given product or service “has been practiced as long as markets have been in operation.”), and is substantially similar to other practices that the courts have held abstract. *See, e.g., Morsa v. Facebook, Inc.*, 77 F. Supp. 3d 1007, 1013 (C.D. Cal. 2014), *aff’d*, 622 F. App’x 915 (Fed. Cir. 2015) (concluding that targeting advertisements to certain consumers is no more than an abstract idea); *Ultramercial, Inc. v. Hulu, LLC*, 772 F.3d 709, 713 (Fed. Cir. 2014)

(offering media content in exchange for viewing an advertisement); *Intellectual Ventures I LLC v. Capital One Bank (USA)*, 792 F.3d 1363, 1370 (Fed. Cir. 2015) (tailoring information presented to a user based on particular information); *Affinity Labs of Texas, LLC v. Amazon.com, Inc.*, 838 F.3d 1266, 1271 (Fed. Cir. 2016) (customizing a user interface to have targeted advertising based on user information).

Having concluded that claim 26 recites a judicial exception, i.e., an abstract idea (Step 2A, Prong 1), we next consider whether the claim recites additional elements that integrate the judicial exception into a practical application (Step 2A, Prong 2).

The Examiner determined, and we agree, that the only additional elements recited in claim 26, beyond the abstract idea, are a server (i.e., the “resource reporting server including at least a processor”), databases (i.e., the “consumer resource database,” “housing database,” “billing database,” and “financial database”), and a computer network (Final Act. 7) — elements that are described in the Specification at a high level of generality, i.e., as generic computer components (*see, e.g.*, Spec. ¶¶ 20–23). We find no indication in the Specification, nor does Appellant direct us to any indication, that the operations recited in claim 26 require any specialized computer hardware or other inventive computer components, i.e., a particular machine, invoke any assertedly inventive programming, 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 technology and/or a technical field 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.<sup>4</sup>

Appellant asserts that the claimed invention is “inextricably tied to computer technology and distinct from the types of concepts found by the courts to be abstract” (Appeal Br. 12). Appellant, thus, ostensibly maintains that claim 26 is not directed to an abstract idea because the claimed invention requires “computers to retrieve and process resource usage data from databases to generate messages, prioritize and reprioritize the messages, and selectively transmit messages according to their priority over a network to computing devices of consumers in a specifically defined process” (*id.*).

The mere fact that claim 26 requires a computer is not a persuasive reason to argue that the claim is not directed to an abstract idea. Indeed, a substantially similar argument was expressly rejected by the Court in *Alice*. Thus, although the claimed invention in *Alice* involved a computer system

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<sup>4</sup> The 2019 Revised Guidance references MPEP § 2106.05(a)–(c) and (e) in describing the considerations that are indicative that an additional element or combination of elements integrates the judicial exception, e.g., the abstract idea, into a practical application. 2019 Revised Guidance, 84 Fed. Reg. at 55. If the recited judicial exception is integrated into a practical application, as determined under one or more of these MPEP sections, the claim is not “directed to” the judicial exception.

acting as a third-party intermediary between two parties: “As stipulated, the claimed method requires the use of a computer to create electronic records, track multiple transactions, and issue simultaneous instructions; in other words, ‘[t]he computer is itself the intermediary,’” *Alice Corp.*, 573 U.S. at 224, the Court held that “the claims at issue amount to ‘nothing significantly more’ than an instruction to apply the abstract idea of intermediated settlement using some unspecified, generic computer.” *Id.* at 225–26. *See also In re TLI Commc’ns LLC Patent Litig.*, 823 F.3d 607, 611 (Fed. Cir. 2016) (“[N]ot every claim that recites concrete, tangible components escapes the reach of the abstract-idea inquiry.”).

We conclude, as did the Examiner, for the reasons outlined above, that claim 26 recites an abstract idea and that the additional elements recited in the claim are no more than generic components used as tools to perform the recited abstract idea. As such, they do not integrate the abstract idea into a practical application. *See Alice Corp.*, 573 U.S. at 223–24 (“[W]holly generic computer implementation is not generally the sort of ‘additional featur[e]’ that provides any ‘practical assurance that the process is more than a drafting effort designed to monopolize the [abstract idea] itself.’” (quoting *Mayo*, 566 U.S. at 77)). Accordingly, we agree with the Examiner that claim 26 is directed to an abstract idea.

*Step Two of the Mayo/Alice Framework (2019 Revised Guidance, Step 2B)*

Having determined under step one of the *Mayo/Alice* framework that claim 26 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 26 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 claim 26 is patent eligible, i.e., that claim 26 includes elements that amount to “significantly more” than an abstract idea because, similar to the claims at issue in *BASCOM Global Internet Services, Inc. v. AT&T Mobility LLC*, 827 F.3d 1341 (Fed. Cir. 2016), claim 26 improves an existing technological process (i.e., a process for generating, prioritizing, and selectively transmitting messages over a network to computing devices of customers) (Appeal Br. 13–14). In this regard, Appellant maintains that claim 26 represents an improvement to Internet data communication of messages because messages are prioritized and reprioritized for selective transmission based on whether users took action or not in response to such messages, i.e., if consumers took action in response to a message, the priority of the message is increased; otherwise the priority of the message is decreased (*id.* at 14).

Appellant asserts that by dynamically adjusting message priorities, only select messages are transmitted over the network to customers’ computing devices, and that this provides significant network bandwidth savings and improved network bandwidth utilization (*id.* at 14–15; *see also* Reply Br. 3, 5–7). Yet, Appellant’s contention that “the present invention provides improved network bandwidth utilization by making improved decisions and transmitting select messages that are relevant” (Reply Br. 6) is but unsupported attorney argument. We find nothing in the Specification, nor does Appellant direct us to anything in the Specification, that attributes an improvement in bandwidth utilization to the claimed invention.

Considered in light of the Specification, the claimed invention, including the

message prioritization, clearly appears focused on addressing a business objective, i.e., providing those messages most likely to be effective in persuading a consumer to moderate his or her resource usage (*see, e.g.*, Spec. ¶¶ 27–32), and not on any claimed means for accomplishing this goal that improves technology, e.g., bandwidth utilization.

We are not persuaded that prioritizing messages for selective transmission based on whether users took action or not in response to such messages is a technological improvement comparable to the situation in *BASCOM*, rather than an improvement to a business practice. And, to the extent that Appellant maintains that claim 26 is patent eligible because there is no risk of preemption (Appeal Br. 15), we note that preemption is not the sole test of patent-ineligibility. Although “preemption may signal patent ineligible subject matter, the absence of complete preemption does not demonstrate patent eligibility.” *Ariosa Diagnostics, Inc. v. Sequenom, Inc.*, 788 F.3d 1371, 1379 (Fed. Cir. 2015).

We are not persuaded, on the present record, that the Examiner erred in rejecting independent claim 26 under 35 U.S.C. § 101. Therefore, we sustain the Examiner’s rejection of claim 26, and claims 27, 28, 30–35, 37–39, 41, 44, 46–50, 52, 57, and 58, which fall with claim 26.

CONCLUSION

In summary:

<b>Claims Rejected</b>	<b>35 U.S.C. §</b>	<b>Reference(s)/Basis</b>	<b>Affirmed</b>	<b>Reversed</b>
26–28, 30–35, 37–39, 41, 44, 46–50, 52, 57, 58	101	Eligibility	26–28, 30–35, 37–39, 41, 44, 46–50, 52, 57, 58	

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