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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
12/485,702	06/16/2009	Rajarshi Ray	030284.02652/090517	3714

15142 7590 11/19/2018
Arent Fox, LLP and Qualcomm, Incorporated
1717 K Street, NW
Washington, DC 20006-5344

EXAMINER

IOSIF, MARIO CINCINAT

ART UNIT	PAPER NUMBER
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3681

NOTIFICATION DATE	DELIVERY MODE
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11/19/2018

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UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

Ex parte RAJARSHI RAY

Appeal 2017-006981
Application 12/485,702¹
Technology Center 3600

Before BRUCE T. WIEDER, BRADLEY B. BAYAT, and
TARA L. HUTCHINGS, *Administrative Patent Judges*.

WIEDER, *Administrative Patent Judge*.

DECISION ON APPEAL

This is a decision on appeal under 35 U.S.C. § 134 from the Examiner’s rejection of claims 1–8, 10–19, 21–30, 32–41, 43–51, 53–61, 63–71, 73–81, and 83–85. We have jurisdiction under 35 U.S.C. § 6(b).

We AFFIRM-IN-PART.

CLAIMED SUBJECT MATTER

Appellant’s invention “relates generally to the operation of wireless communication systems, and more particularly, to methods and apparatus for advertisement mixing in a communication system.” (Spec. ¶ 2.) In short, “a

¹ According to Appellant, the real party in interest is QUALCOMM Incorporated. (Appeal Br. 1.)

method is provided that is operable by a network node for providing advertisements in a communication network.” (*Id.* ¶ 7.)

Claims 1, 12, 23, 34, 45, 55, 65, and 75 are the independent claims on appeal. Claim 1 is illustrative. It recites:

1. A method operable by a network node for providing advertisements in a communication network, the method comprising:

obtaining, by a transceiver of the network node via a first communication link, device information associated with each of a plurality of communication devices within the communication network;

determining, by a processor of the network node, one or more advertisements for a callee communication device upon detecting, via a second communication link, a call being initiated between a caller communication device and the callee communication device based at least on obtained information of the call and the callee communication device, wherein the caller and callee communication devices are among the plurality of communication devices within the communication network;

transmitting, by the transceiver of the network node via the second communication link, at least a portion of the one or more advertisements for storing at the callee communication device during off-peak times of the communication network on a selected periodic basis;

mixing the one or more advertisements with a corresponding subscribed call service to be provided to the callee communication device, wherein at least one of the one or more advertisements stored at the callee communication device is selectively retrieved to be associated with the corresponding subscribed call service for rendering on the callee communication device; and

delivering the one or more advertisements and the corresponding subscribed call service to the callee communication device.

REJECTIONS

Claims 1–8, 10–19, 21–30, 32–41, 43–51, 53–61, 63–71, 73–81, and 83–85 are rejected under 35 U.S.C. § 101 as directed to a judicial exception without significantly more.

Claims 1–8, 10–19, 21–30, 32–41, 43–51, 53–61, 63–71, 73–81, and 83–85 are rejected under 35 U.S.C. § 103(a) as unpatentable in view of Bookstaff (US 2004/0091093 A1, pub. May 13, 2004) and Othmer (US 2006/0236258 A1, pub. Oct. 19, 2006).

ANALYSIS

The § 101 rejection

“Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.” 35 U.S.C. § 101. Section 101, however, “contains an important implicit exception: Laws of nature, natural phenomena, and abstract ideas are not patentable.” *Alice Corp. Pty. Ltd. v. CLS Bank Int’l*, 134 S. Ct. 2347, 2354 (2014) (quoting *Ass’n for Molecular Pathology v. Myriad Genetics, Inc.*, 569 U.S. 576, 589 (2013)).

Alice applies a two-step framework, earlier set out 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*, 134 S. Ct. at 2355.

Under the two-step framework, it must first be determined if “the claims at issue are directed to a patent-ineligible concept.” *Id.* If the claims

are determined to be directed to a patent-ineligible concept, e.g., an abstract idea, then the second step of the framework is applied to determine if “the elements of the claim . . . contain[] an ‘inventive concept’ sufficient to ‘transform’ the claimed abstract idea into a patent-eligible application.” *Id.* at 2357 (citing *Mayo*, 566 U.S. at 72–73, 79).

With regard to step one of the *Alice* framework, the Examiner determines that “the claims are directed towards providing advertisements by a network node in a communication network, which represents an abstract idea.” (Non-Final Action 3.)

Appellant argues “that the Office Action erred by not analyzing the actual claim language and instead considering only an oversimplified and inaccurate conclusory statement of the gist of the claims.” (Appeal Br. 13.)

Under step one of the *Alice* framework, we “look at the ‘focus of the claimed advance over the prior art’ to determine if the claim’s ‘character as a whole’ is directed to excluded subject matter.” *Affinity Labs of Texas, LLC v. DIRECTV, LLC*, 838 F.3d 1253, 1257 (Fed. Cir. 2016) (quoting *Elec. Power Grp., LLC v. Alstom S.A.*, 830 F.3d 1350, 1353 (Fed. Cir. 2016)).

The Specification provides evidence as to what the claimed invention is directed. In this case, the Specification discloses that the invention “relates generally to the operation of wireless communication systems, and more particularly, to methods and apparatus for advertisement mixing in a communication system.” (Spec. ¶ 2.) The Specification further discloses that the claimed invention “operates to present advertisements to device users when utilizing a variety of call services in a communication network.” (*Id.* ¶ 6.)

Claim 1 provides further evidence. Claim 1 recites “[a] method . . . for providing advertisements in a communication network . . . comprising: obtaining . . . device information associated with . . . devices within the communication network,” “determining . . . advertisements for a callee communication device upon detecting . . . a call being initiated between a caller . . . and the callee,” “transmitting . . . advertisements for storing at the callee . . . device,” “mixing the . . . advertisements with a corresponding subscribed call service to be provided to the callee,” “and delivering . . . advertisements and the corresponding subscribed call service to the callee.”

Claim 45 also provides evidence. Claim 45 recites “[a] method . . . for obtaining advertisements in a communication network . . . comprising: transmitting . . . device information associated with the communication device to a network node,” “receiving by . . . the communication device . . . a subscribed call service associated with an incoming call,” “obtaining an advertisement along with the subscribed call service,” “rendering the advertisement on the communication device,” “obtaining and storing . . . advertisements,” “and selectively retrieving the . . . advertisements to be associated with . . . subscribed call services.”

Although we and the Examiner describe, at different levels of abstraction, to what the claims are directed, it is recognized that “[a]n abstract idea can generally be described at different levels of abstraction.” *Apple, Inc. v. Ameranth, Inc.*, 842 F.3d 1229, 1240 (Fed. Cir. 2016). That need not and, in this case does not, “impact the patentability analysis.” *See id.* at 1241.

In this case, as in *Alice*, we need not labor to delimit the precise contours of the “abstract ideas” category. It is enough to recognize that

there is no meaningful distinction in the level of abstraction between the concept of tailoring and delivering content such as advertisements “based on information known about the customer,” *Intellectual Ventures I LLC v. Capital One Bank (USA)*, 792 F.3d 1363, 1369 (Fed. Cir. 2015), and “present[ing] advertisements to device users . . . utilizing a variety of call services” (Spec. ¶ 6). Both are squarely within the realm of “abstract ideas” as the Court has used that term. *See Alice*, 134 S. Ct. at 2357.

In view of the above, we agree with the Examiner that claims 1 and 45 are directed to an abstract idea. (*See Non-Final Action 3.*)

Step two of the *Alice* framework has been described “as 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.’” *Alice*, 134 S. Ct. at 2355 (citing *Mayo*, 566 U.S. at 72–73).

The Examiner determines that

[t]he AD server its components and the processors are recited at a high level of generality and its broadest reasonable interpretation comprises a generic computer performing generic functions. In the instant case, it is noted, that these elements, when taken both individually and/or as an ordered combination, execute in a manner routinely and conventionally expected of these elements.

(Non-Final Action 5.)

Appellant argues “that the Federal Circuit Court has upheld the [sic] patentability where the claimed solution is necessarily rooted in computer technology in order to overcome a problem specifically arising in the realm of computer networks. *See, DDR Holdings, LLC v. Hotels.com, L.P.*, 773 F.3d 1245 (Fed. Cir. 2014).” (Appeal Br. 13, emphasis omitted.) In

particular, Appellant argues, “the claimed invention addresses a wireless communication network-centric challenge of determining and presenting advertisements to device users when utilizing a variety of call services in the communication network.” (*Id.* at 14.) For example, “[s]imilar to the creation of a composite web page in *DDR*, the present application recites obtaining, by a network node (*i.e.*, AD server 200), device information . . . to determine and deliver advertisements for a communication device in connection with the call services that are also provided to the communication device.” (*Id.* at 14–15.)

Appellant’s Specification discloses that “[s]ervices offered by today’s carriers and service providers . . . [include] Call Identification (ID) or Caller Ring-Back Tones (CRBTs).” (Spec. ¶ 3.) “In the caller ID case, the phone generally displays the caller identification information. In the CRBT case, the caller hears a pre-selected ring-tone and generally has no option to skip it or alter it.” (*Id.*) “The network carriers and service providers would like to have mechanisms to allow various advertisements (ADs) to be presented to device users in order to generate more revenue from the same user-base. For example, the advertisements may be context-based, location-based or even time-based advertisements.” (*Id.* ¶ 4.)

To that end, the Specification further discloses:

Each device comprises AD receiver **128**. The AD receiver **128** operates to decode ADs mixed in with call services received from the AD server **102**. For example, the device **120** receives the AD mixed in with the call ID service and the device **122** receives the AD mixed in with the CRBT service. The AD receiver **128** at each device operates to render received ADs using a device display or sound system. . . . [E]ach device is assigned ADs based on device location, context and/or time and

those ADs are delivered as part of call services provided by the AD server **102**.

In another aspect, ADs are delivered to the devices **106** during off-peak times and stored in an advertisement inbox at each device. When receiving a call service, the AD receiver **128** operates to obtain selected ADs from the advertisement inbox and present these ADs to the device user.

(*Id.* ¶¶ 45–46.)

Relatedly, claim 1 recites “transmitting, by the transceiver of the network node via the second communication link, at least a portion of the one or more advertisements for storing at the callee communication device during off-peak times of the communication network on a selected periodic basis.” Claim 1 further recites

mixing the one or more advertisements with a corresponding subscribed call service to be provided to the callee communication device, wherein at least one of the one or more advertisements stored at the callee communication device is selectively retrieved to be associated with the corresponding subscribed call service for rendering on the callee communication device.

Considered as an ordered combination, claim 1 recites a particular arrangement of steps, e.g., transmitting ads during off-peak times for storing at a callee device, retrieving a stored ad and mixing it with a call service, e.g., caller ID or CRBT, and providing this to the callee’s device. *See BASCOM Global Internet Servs., Inc. v. AT&T Mobility LLC*, 827 F.3d 1341, 1350 (Fed. Cir. 2016).

Although the Examiner determines that “storing an advertisement for later display is further part of the advertising effort” (Answer 3), the Examiner does not determine that it was conventional to transmit an ad for storing at a callee device, and to retrieve the stored ad and mix it with a call

service, and provide this to the callee's device. Therefore, “[a]lthough the invention . . . was engineered in the context of [providing advertisements by a network node], the invention was not claiming a business method *per se*, but was instead claiming a technical way to satisfy an existing problem for [carriers and service providers]. See *BASCOM*, 827 F.3d at 1351 (discussing *DDR Holdings*, 773 F.3d at 1248–50 and 1257–59).

Thus, we will reverse the rejection of claim 1 under § 101. Independent claims 12, 23, and 34 contain similar language. Therefore, we will also reverse, under § 101, the rejection of independent claims 12, 23, and 34, and dependent claims 2–8, 10, 11, 13–19, 21, 22, 24–30, 32, 33, 35–41, 43, 44, and 85.

Unlike claim 1, independent claim 45 simply recites “obtaining an advertisement along with the subscribed call service,” “rendering the advertisement on the communication device,” and “obtaining and storing one or more advertisements,” all without specifying from where the advertisement is obtained or where it is stored. In other words, claim 45 simply recites functional results to be achieved. That is not sufficient to under step two of the *Alice* framework. See, e.g., *Apple, Inc.*, 842 F.3d at 1241; see also *Intellectual Ventures I LLC v. Capital One Fin. Corp.*, 850 F.3d 1332, 1342 (Fed. Cir. 2017).

Thus, we will affirm the rejection of claim 45 under § 101. Independent claims 55, 65, and 75 contain similar language. Therefore, we will also affirm, under § 101, the rejection of independent claims 55, 65, and 75, and dependent claims 46–51, 53, 54, 56–61, 63, 64, 66–71, 73, 74, 76–81, 83, and 84, which are not separately argued. See 37 C.F.R. § 41.37(c)(1)(iv).

The § 103(a) rejection

In relevant part, claim 1 recites (emphasis added): “*determining . . . one or more advertisements for a callee communication device upon detecting . . . a call being initiated.*”

The Examiner finds that Bookstaff discloses a “[s]ystem and method for advertising over a communications network.” (Non-Final Action 7.) Specifically, the Examiner finds that Bookstaff discloses a “[t]elephone call whereby a subscribed caller using a communication device calls or places a call to a communication device of a subscribed callee . . . , wherein said calling functionality comprises a plurality of call services.” (*Id.* at 7–8.)

The Examiner finds that Bookstaff further discloses that

using the call features provided by the call feature module, the advertisement module can be adapted to select one or more targeted advertisements . . . based on the identified call features and provide the targeted advertisements for presentation to the callee (and/or caller and/or both) via the telephone network, wherein advertisements may be provided for playback to the caller at any number of points during a telephone call.

(*Id.* at 8.)

The Examiner finds that Othmer discloses a system “configured to deliver different types of content using different communication links . . . or network modes (different transmission modes according to actual circumstances) (. . . ‘while engaging in a telephone call’).” (*Id.* at 10.)

Appellant, however, argues that

Bookstaff does not disclose or suggest . . . determining one or more advertisements for a callee communication device upon detecting, via a second communication link, a call being initiated between a caller communication device and the callee communication device based at least on obtained information of the call and the callee communication device.

(Appeal Br. 17.) Appellant further argues that “Othmer6258 does not remedy the foregoing deficiencies in Bookstaff.” (*Id.*)

“[T]here must be some articulated reasoning with some rational underpinning to support the legal conclusion of obviousness.” *KSR Int’l Co. v. Teleflex Inc.*, 550 U.S. 398, 418 (2007) (quoting *In re Kahn*, 441 F.3d 977, 988 (Fed. Cir. 2006)). Here, however, the Examiner does not provide sufficient articulated reasoning for us to fully evaluate the Examiner’s position as to why the cited disclosures in Bookstaff or Othmer teach “*determining . . . one or more advertisements for a callee communication device upon detecting . . . a call being initiated,*” as recited in claim 1.

Therefore, we reverse the rejection of claim 1 under § 103(a). Independent claims 12, 23, and 34 contain similar language. Therefore, we will also reverse, under § 103(a), the rejection of independent claims 12, 23, and 34, and dependent claims 2–8, 10, 11, 13–19, 21, 22, 24–30, 32, 33, 35–41, 43, 44, and 85.

Claim 45, however, does not recite determining an advertisement upon detecting a call being initiated. Rather, claim 45 recites “obtaining an advertisement along with the subscribed call service, wherein the advertisement is determined based at least on obtained information of the incoming call and the device information associated with the communication device.” And paragraph 46 of Bookstaff discloses that “using the call feature(s) provided by the call feature module **224**, the advertisement module **226** could be adapted to select one or more targeted advertisements based on the identified call features and provide the targeted advertisements for presentation to the caller via the telephone network **208**.” (Bookstaff ¶ 46; *see also* Non-Final Action 7–8.)

Appellant further argues that Othmer does not disclose “using different communication links for obtaining device information associated with each of a plurality of communication devices within the communication network, and detecting a call between communication devices and transmitting determined advertisement for either devices.” (Appeal Br. 18.)

We do not find this argument persuasive of error. Othmer discloses that

content can be obtained from multiple content sources using any of a number of data transmission modes or “bearers”, depending on the configuration of the device. For example, as the user changes location, a cell phone equipped to communicate with a cellular telephone system and to sense the wireless access points of both Bluetooth and 802.11 networks may obtain stock quotes via an SMS text message, art exhibit content via Bluetooth, and a discount coupon from a nearby retailer associated with an 802.11 network.

(Othmer ¶ 16.) And, the Examiner finds, and we agree, that Othmer discloses that a “mobile communication device of a user is configured to sense (automatically or otherwise) [a] wireless access point It follows that device information or information about device capability (e.g., Bluetooth communications capability) is acquired (*obtaining*) by the system (acquired automatically).” (Non-Final Action 9–10, citing Othmer ¶¶ 16, 33, 34, and Fig. 6.)

Additionally, the Examiner determines:

It would have been obvious to one of ordinary skill in the art at the time of the invention to expand the features of targeting advertisements . . . as taught in the system of Bookstaff; to include the feature as taught in Othmer of obtaining device information via a first communication link, detecting a phone call via a second communication link, and delivering advertisement content while engaging in a telephone call.

(Non-Final Action 10.)

Appellant's other arguments have been considered and are not deemed persuasive of error.

In view of the above, we affirm the rejection of claim 45 under § 103(a). Independent claims 55, 65, and 75 contain similar language. Therefore, we will also affirm, under §103(a), the rejection of independent claims 55, 65, and 75, and dependent claims 45–51, 53, 54, 56–61, 63, 64, 66–71, 73, 74, 76–81, 83, and 84, which are not separately argued. *See* 37 C.F.R. § 41.37(c)(1)(iv).

DECISION

The Examiner's rejection of claims 1–8, 10–19, 21–30, 32–41, 43, 44, and 85 under 35 U.S.C. § 101 is reversed.

The Examiner's rejection of claims 45–51, 53–61, 63–71, 73–81, 83, and 84 under 35 U.S.C. § 101 is affirmed.

The Examiner's rejection of claims 1–8, 10–19, 21–30, 32–41, 43, 44, and 85 under 35 U.S.C. § 103(a) is reversed.

The Examiner's rejection of claims 45–51, 53–61, 63–71, 73–81, 83, and 84 under 35 U.S.C. § 103(a) is affirmed.

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-IN-PART