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Paper 33
Entered: June 27, 2023

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

APPLE INC.,
Petitioner,

v.

BILLJCO LLC,
Patent Owner.

IPR2022-00310
Patent 9,088,868 B2

Before THU A. DANG, LYNNE H. BROWNE, and
GARTH D. BAER, *Administrative Patent Judges*.

DANG, *Administrative Patent Judge*.

JUDGMENT
Final Written Decision
Determining All Challenged Claims Unpatentable
35 U.S.C. § 318(a)

I. INTRODUCTION

A. Background

In response to a Petition (Paper 2, "Pet.") filed by Apple Inc. ("Petitioner"), we instituted *inter partes* review of claims 1, 2, 5, 20, 24, 25, 28, and 43 ("the challenged claims") of U.S. Patent No. 9,088,868 B2 (Ex. 1001, "the '868 patent"). *See* Paper 8 ("Dec. Inst."). During trial, BillJCo, LLC ("Patent Owner") filed a Response (Paper 20, "PO Resp.")[1], to which Petitioner filed a Reply (Paper 23, "Pet. Reply."). In turn, Patent Owner filed a Sur-reply. Paper 25 ("PO Sur-reply"). An oral hearing was held with the parties on April 14, 2023. A transcript of the hearing has been entered into the record. Paper 32 ("Tr.").

We have jurisdiction under 35 U.S.C. § 6. This Decision is a Final Written Decision under 35 U.S.C. § 318(a) as to the patentability of the claims on which we instituted trial. Based on the record before us, Petitioner has shown by a preponderance of the evidence that claims 1, 2, 5, 20, 24, 25, 28, and 43 of the '868 patent are unpatentable.

B. Real Parties in Interest

The parties identify themselves as the only real parties in interest. Pet. 1; Paper 3, 2.

C. Related Proceedings

The parties indicate that the '868 patent is the subject of the following district court cases: 1) *BillJCo, LLC v. Apple Inc.*, No. 6:21-cv-00528 (W.D. Tex.) ("District Court Litigation"); 2) *BillJCo, LLC v. Cisco Systems, Inc.*,

[1] We refer to the public, redacted version of the Response.

No. 2:21-cv-00181 (E.D. Tex.); and 3) *BillJCo, LLC v. Hewlett Packard Enterprise Company*, No. 2:21-cv-00183 (E.D. Tex.). Pet. 1; Paper 3, 2.

D. The '868 Patent

The '868 patent, titled "Location Based Exchange Permissions," issued on July 21, 2015, from Application No. 14/087,313, filed on November 22, 2013. Ex. 1001, codes (54), (45), (21), (22).

The '868 patent relates to "location based exchanges of data between distributed mobile data processing systems [(MSs)] for locational applications." *Id.* at 1:20–24. The '868 patent states that the "[a]dvantages of having a service as the intermediary point between clients, users, and systems, and their associated services, include[] centralized processing, centralized maintaining of data, . . . [and] having a supervisory point of control." *Id.* at 1:39–46. But "[w]hile a centralized service has its advantages, there are also disadvantages." *Id.* at 1:66–67. For example, according to the '868 patent, a centralized service may "suffer from performance and maintenance overhead" and presents concerns about the "privacy" of users' "personal information." *Id.* at 2:6–7, 2:43–53.

To address these alleged disadvantages, the '868 patent states that "[a] reasonable requirement is to push intelligence out to the mobile data processing systems themselves, for example, in knowing their own locations and perhaps the locations of other nearby mobile data processing systems." *Id.* at 2:59–62. Specifically, the '868 patent describes "a new terminology, system, and method referred to as Location Based eXchanges (LBX)." *Id.* at 3:57–59. It is a "foundation requirement" of LBX "for each participating [mobile data processing system] to know, at some point in time, their own whereabouts." *Id.* at 4:9–11. "When two or more MSs know their own

whereabouts, LBX enables distributed locational applications whereby a server is not required to middleman social interactions between the MSs." *Id.* at 4:14–17.

Whereabouts information may be communicated between MSs at great distances from each other provided there are privileges and/or charters in place making such whereabouts information relevant for the MS. *Id.* at 12:53–57. Whereabouts information of others will not be maintained unless there are privileges in place to maintain it. *Id.* at 12:58–59. Whereabout information may not be shared with others if there have been no privileges granted to a potential receiving MS. *Id.* at 12:59–61. Privileges can provide relevance to what whereabouts information is of use, or should be processed, maintained, or acted upon. *Id.* at 12:62–64.

An illustration of an embodiment of the '868 patent's Whereabouts Data Record (WDR) is depicted in Figure 11A, reproduced below:

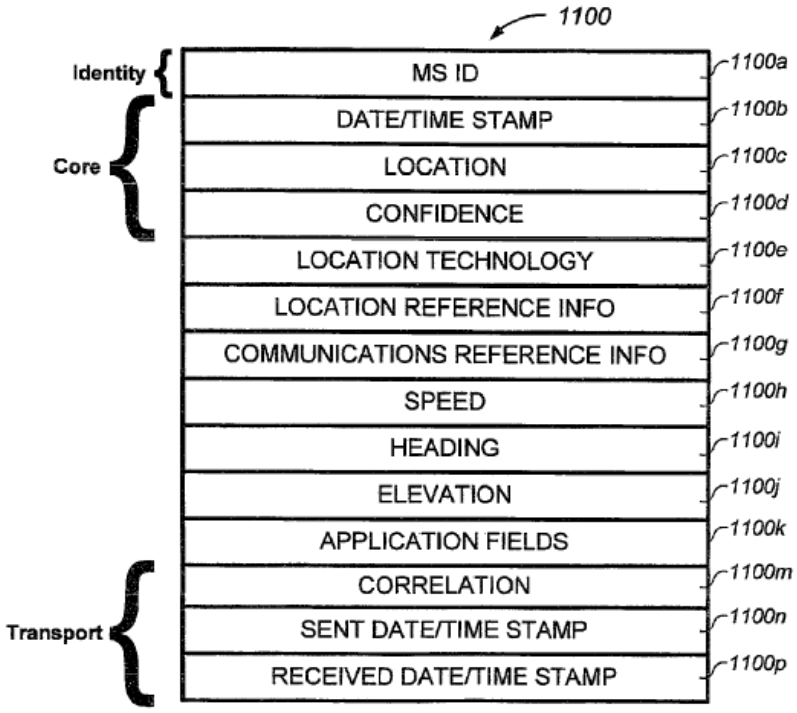

Figure 11A shows WDR 1100 comprising WDR fields 1100a–1100p. As shown in Figure 11A, MS ID field 1100a is set with "Unique MS identifier of the MS" invoking whereabout data insertion. *Id.* at 32:27–28. This field is used to distinguish the MS WDR on queue from other originated WDRs. *Id.* at 32:28–30.

An illustration of an embodiment of the '868 patent's Granting Data Record (GDR) is depicted in Figure 35A, reproduced below:

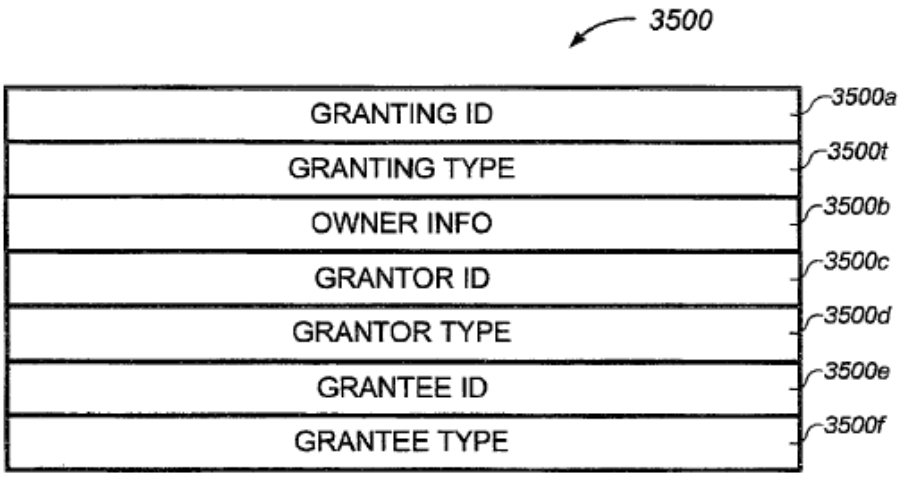

Figure 35A shows GDR 3500 comprising GDR fields 3500a–3500f. In Figure 35A, GDR 3500 is the main data record for defining a granting of permissions or charter. *Id.* at 142:54–55. Granting ID field 3500a contains a unique number generated for record 3500 to distinguish from all other records maintained. *Id.* at 32:28–30. Granting type field 3500t distinguishes the type of permission or charter for: a grantor granting all privileges to a grantee, grantor granting specific privilege(s) and/or grants of privileges (permission(s)) to a grantee, and a grantor granting enablement of a charter to a grantee. *Id.* at 142:66–143:8. Owner info field 3500b provides the owner (creator and/or maintainer) of GDR 3500. *Id.* at 143:8–19. Grantor

ID field 3500c provides an identifier of the granting grantor, and grantor type field 3500d provides the type of grantor ID field 3500c. *Id.* at 143:19–21. Grantee field 3500e provides an identifier of the grantee, and grantee type field 3500f provides the type of grantee ID field 3500e. *Id.* at 143:21–24.

E. Illustrative Claim

Of the challenged claims (claims 1, 2, 5, 20, 24, 25, 28, and 43), claims 1 and 24 are independent. Claim 1 is illustrative and is reproduced below.

> 1. A method, comprising:
>
> accepting user input, from a user of a mobile application user interface of a user carried mobile data processing system, for configuring a user specified location based event configuration to be monitored and triggered by the mobile data processing system wherein the mobile data processing system uses the user specified location based event configuration to perform mobile data processing system operations comprising:
>
> accessing at least one memory storing a first identifier and a second identifier and a third identifier wherein each identifier is determined by the mobile data processing system for at least one location based condition monitored by the mobile data processing system for the mobile data processing system triggering a location based action, the location based action performed by the mobile data processing system upon the mobile data processing system determining the at least one location based condition including whether identifier data determined by the mobile data processing system for a wireless data record received for processing by the mobile data processing system matches the third identifier and at least one of the first identifier and the second identifier, the wireless data record corresponding to a beaconed broadcast wireless data transmission that is beaconed outbound from an originating data processing system to a destination data processing system, the first identifier indicative of the mobile data processing

system of the mobile application user interface for use by the mobile data processing system in comparing the first identifier to the identifier data determined by the mobile data processing system for the wireless data record received for processing by the mobile data processing system, the second identifier indicative of originating data processing system identity data of the wireless data record received for processing for use by the mobile data processing system in comparing the second identifier to the identifier data determined by the mobile data processing system for the wireless data record received for processing by the mobile data processing system, the third identifier indicative of the originating data processing system of the wireless data record received for processing wherein the third identifier is monitored by the mobile data processing system for use by the mobile data processing system in comparing the third identifier to the wireless data record received for processing by the mobile data processing system;

receiving for processing the wireless data record corresponding to the beaconed broadcast wireless data transmission that is beaconed outbound from the originating data processing system to the destination data processing system;

determining the identifier data for the wireless data record received for processing by the mobile data processing system;

comparing the identifier data for the wireless data record received for processing by the mobile data processing system with the third identifier and the at least one of the first identifier and the second identifier;

determining the at least one location based condition of the user specified location based event configuration including whether the identifier data for the wireless data record received for processing by the mobile data processing system matches the third identifier and the at least one of the first identifier and the second identifier; and

performing, upon the determining the at least one location based condition, the location based action in

> accordance with the determining the at least one location based condition of the user specified location based event configuration including whether the identifier data for the wireless data record received for processing by the mobile data processing system matches the third identifier and the at least one of the first identifier and the second identifier.

Ex. 1001, 283:55–284:65. Claim 24, directed to a "user carried mobile data processing system," recites similar limitations. *Id.* at 286:40–287:56.

F. Evidence

Petitioner submits the following evidence:

Evidence	Exhibit No.
Declaration of Thomas La Porta, Ph.D.	1002
Haberman, US 2005/0096044 A1, published May 5, 2005 ("Haberman")	1004
Boger, US 2002/0159401 A1, published Oct. 31, 2002 ("Boger")	1005
Evans, US 6,327,535 B1, issued Dec. 4, 2001 ("Evans")	1006

Patent Owner submits the following evidence:

Evidence	Exhibit No.
Declaration of Istvan Jonyer, Ph.D.	2008
Deposition of Dr. La Porta	2010

G. Asserted Grounds

Petitioner asserts that the challenged claims are unpatentable on the following grounds:

Claims Challenged	35 U.S.C. §[2]	Reference(s)/Basis
1, 2, 5, 20, 24, 25, 28, 43	103	Haberman

[2] The Leahy-Smith America Invents Act ("AIA"), Pub. L. No. 112-29, 125 Stat. 284, 287–88 (2011), amended 35 U.S.C. § 103, effective March 16, 2013. Because the application from which the '868 patent claims priority to

Claims Challenged	35 U.S.C. §[2]	Reference(s)/Basis
1, 2, 5, 20, 24, 25, 28, 43	103	Haberman, Boger
1, 2, 5, 20, 24, 25, 28, 43	103	Haberman, Evans
1, 2, 5, 20, 24, 25, 28, 43	103	Haberman, Boger, Evans

II. ANALYSIS

A. Level of Ordinary Skill in the Art

Petitioner argues that a person of ordinary skill in the art ("POSITA") would have had "at least a bachelor's degree in computer science, computer engineering, or an equivalent, and two years of experience relating to wireless communications." Pet. 5 (citing Ex. 1002 ¶¶ 37–38). Petitioner's description of the level of ordinary skill in the art is supported by the testimony of Petitioner's declarant, Dr. La Porta. Ex. 1002 ¶¶ 37–38. Patent Owner does not propose a description of the level of ordinary skill in the art or dispute Petitioner's description. *See generally* PO Resp.

We apply Petitioner's definition of a POSITA at the time of the claimed invention because, based on the record, this proposal is consistent with the '868 patent, the asserted prior art, and is supported by the testimony of Dr. La Porta.

B. Claim Construction

In an *inter partes* review proceeding, a claim of a patent is construed using the same standard used in a civil action under 35 U.S.C. § 282(b), including construing the claim in accordance with the ordinary and customary meaning of the claim as understood by one of ordinary skill in the

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was filed before this date, the pre-AIA version of § 103 applies.

art and the prosecution history pertaining to the patent. 37 C.F.R. § 42.100(b). Only those terms in controversy need to be construed, and only to the extent necessary to resolve the controversy. *See Nidec Motor Corp. v. Zhongshan Broad Ocean Motor Co. Matal*, 868 F.3d 1013, 1017 (Fed. Cir. 2017) (quoting *Vivid Techs., Inc. v. Am. Sci. & Eng'g, Inc.*, 200 F.3d 795, 803 (Fed. Cir. 1999)).

Petitioner submits that "the challenged claims should be interpreted according to their plain and ordinary meaning." Pet. 6. Patent Owner presents a proposed construction for "user specified location based event configuration to perform mobile data processing system operations," recited in independent claims 1 and 24. PO Resp. 16–22 (emphasis omitted). Patent Owner also presents a proposed construction for "identifier data . . . for a wireless data record," recited in claims 1 and 24. *Id.* at 22–23 (emphasis omitted).

In its Reply, Petitioner takes issue with Patent Owner's contention that "'configuring a user specified location based event configuration to be monitored and triggered by the mobile data processing system' refers to the act of 'configuring privilege data.'" Pet. Reply 2 (citing PO Resp. 16–17). Petitioner also takes issue with Patent Owner's contention that "a grantee identity in a privilege conveyance between a grantor and a grantee corresponds to the claimed identifier data." *Id.* at 4 (citing PO Resp. 22–23). Petitioner then contends that claims 1 and 24 "only require that the first identifier be 'indicative of the mobile data processing system.'" *Id.* at 11.

In light of the parties' arguments and evidence, we find that it is necessary to address the proposed claim construction of claim terms: "user specified location based event configuration to perform mobile data

processing system operations," "identifier data . . . for a wireless data record," and "first identifier indicative of the mobile data processing system," as recited in independent claims 1 and 24, but only to the extent necessary to resolve the disputed issues before us.

1. "user specified location based event configuration to perform mobile data processing system operations"

Claims 1 and 24 recite "accepting user input . . . for configuring a user specified location based event configuration . . . wherein the mobile data processing system uses the user specified location based event configuration to perform mobile data processing system operations." Ex. 1001, 283:56–63. We are unpersuaded by Patent Owner's contention that "the subject claim limitation recites configuring privilege data." PO Resp. 22. As Petitioner points out, the claims recite "'location based event configuration' and not 'privilege data.'" Pet. Reply 2.

Although Patent Owner references the testimonies of Dr. La Porta and Dr. Jonyer, and contends that "the intrinsic evidence establishes that the subject claim phrase relates to the configuring of privilege data" (PO Resp. 16–17 (citing Ex. 1002, 26, 47, 65)), we agree with Petitioner that "at no point does the claim or the specification describe 'a user specified location based event configuration' as privilege data." Pet. Reply 2–3. Focusing on Patent Owner's cited passage in the Specification of the '868 patent (PO Resp. 17), we find that, at most, the cited passage says "[t]he LBX platform includes a variety of ***embodiments*** for charter and permission definitions." *See* Ex. 1001, 12:11–27 (emphasis added). While the cited passage says that embodiments of the invention relate to privilege data (*id.*),

nothing in the cited passage defines "user specified location based [ ] configuration" as "privilege data," as Patent Owner asserts. Pet. Reply 2–3.

We find that the passage cited by Patent Owner from the Specification of the '868 patent to lack any clear definition that would support a construction calling for the "user specified location based configuration" to be limited to "privilege data." PO Resp. 22. As Patent Owner's reliance on the Specification does not support its proposed construction, we determine that the plain and ordinary meaning in light of the Specification and the claim language does not limit "user specified location based [ ] configuration" to "privilege data." Therefore, for the foregoing reasons, based on the complete record, we determine that "user specified location based [ ] configuration" should not be narrowly construed to mean "privilege data," as Patent Owner proposes. *Id.*

2. "identifier data . . . for a wireless data record"

Claims 1 and 24 recite "the location based action . . . determining the at least one location based condition including whether identifier data determined by the mobile data processing system for a wireless data record received for processing by the mobile data processing system matches the third identifier and at least one of the first identifier and the second identifier." Ex. 1001, 284:3–11. Although we agree with Patent Owner that the claimed "identifier data" is compared with the claimed third identifier, as well as at least one of the first identifier and the second identifier, and that each of the first, second, and third identifiers is part of the previously-discussed "accepting user input . . . for configuring a user specified location based event configuration" limitation (PO Resp. 22–23), we are unpersuaded by Patent Owner's contention that the identifiers "represent configured

privilege data." *Id.* We are similarly unpersuaded by Patent Owner's contention that, according to the Specification of the '868 patent, "grantee identity corresponds to the claimed identifier data, which is then compared with configured privilege data." *Id.* at 23.

As Petitioner points out, the claims recite "'location based event configuration' and not 'privilege data.'" Pet. Reply 2. Further, we agree with Petitioner that "the claim language does not provide any indication that the identifier data corresponds to the grantee in a grantor/grantee conveyance of a privilege." *Id.* at 4.

Focusing on Patent Owner's cited passage in the Specification of the '868 patent (PO Resp. 23), we find that, at most, the cited passage says that "permission is granted from a grantor identity to a grantee identity," wherein "[d]epending on what permission are determined relevant to (i.e., applicable to) a WDR being processed . . . , an action or plurality of actions which are associated with the permission can automatically occur." *See* Ex. 1001, 120:46–59. Although the cited passage says that permission is granted from a grantor identity to a grantee identity, and that actions associated with the permission can automatically occur (*id.*), nothing in the cited passage defines "identifier data" as "grantee identity." PO Resp. 23.

We find that the passage in the Specification of the '868 patent cited by Patent Owner lacks any clear definition that would support a construction calling for the "identifier data" to be limited to "grantee identity." PO Resp. 22–23. Therefore, for the foregoing reasons, based on the complete record, we determine that "identifier data" should not be narrowly construed to mean "grantee identity," as Patent Owner proposes. *Id.*

3. "first identifier"

Claims 1 and 24 recite "accessing at least one memory storing a first identifier and a second identifier and a third identifier," with "the first identifier indicative of the mobile data processing system of the mobile application user interface for use by the mobile data processing system in comparing the first identifier to the identifier data." Ex. 1001, 283:64–284:22. Although we agree with Petitioner that "[t]he instituted claims only require that the first identifier be 'indicative of the mobile data processing system" (Pet. Reply 11), we are unpersuaded by Petitioner's contention that, because "GPS information is indicative of the mobile device," "GPS information is equivalent to the claimed first identifier." *Id.* at 12.

In claims 1 and 24, the recited term at issue is an "***identifier***." *See* Ex. 1001, 283:64–284:22 (emphasis added). While the claim also recites that the first identifier be "indicative of the mobile device" (*id.*), we determine that the plain and ordinary meaning requires that an "identifier" be able to ***identify***, not just be indicative. *See, for example*, Merriam-Webster's Collegiate Dictionary, 10th Edition, 1998 ("identifier . . . n (1889): one that identifies"). We thus agree with Patent Owner's contention, which is consistent with Dr. La Porta's testimony, that "the 'first identifier' must identify the mobile device." PO Resp. 33 (citing Ex. 2010, 23:23–25:14 ("Q. SO what – what is required to satisfy something being indicative of the mobile data processing system? . . . A. –in this context. So it's identifying the mobile device.")).

Furthermore, claims 1 and 24 also recite that the first identifier be stored in a "memory" along with second and third identifiers. *See*

Ex. 1001, 283: 64–65. Here, as Petitioner points out, "GPS functionality" is used "***to obtain GPS data***." Pet. Reply 11 (emphasis added). That is, in the passages of Haberman cited by Petitioner to support its claim construction, GPS data is obtained using GPS functionality, rather than stored with identifiers. *Id.*

We find Petitioner fails to provide any evidence that would support Petitioner's proposed construction calling for the "first identifier" stored in memory along with second and third identifiers to encompass "GPS information." Pet. Reply 12. Therefore, for the foregoing reasons, based on the complete record, we determine that "first identifier" should not be construed to encompass "GPS information," as Petitioner proposes. *Id.*

C. Principles of Law

A patent claim is unpatentable under 35 U.S.C. § 103(a) if the differences between the claimed subject matter and the prior art are such that the subject matter, as a whole, "would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains." *KSR Int'l Co. v. Teleflex Inc.*, 550 U.S. 398, 406 (2007). The question of obviousness is resolved on the basis of underlying factual determinations including: (1) the scope and content of the prior art; (2) any differences between the claimed subject matter and the prior art; (3) the level of ordinary skill in the art; and (4) objective evidence of non-obviousness. *See Graham v. John Deere Co.*, 383 U.S. 1, 17–18 (1966).

D. Obviousness of Claims 1, 2, 5, 20, 24, 25, 28, and 43 over Haberman in view of Boger (Ground 2)

Petitioner argues that claims 1, 2, 5, 20, 24, 25, 28, and 43 would have been obvious over Haberman. Pet. 7–32. Further, Petitioner argues that to the extent Haberman does not explicitly teach a first identifier or a third

identifier, Boger teaches a Bluetooth packet that includes an AM_ADDR address associated with a mobile device (i.e., a first identifier) and an access code (i.e., a third identifier). *Id.* at 34–40 (citing Ex. 1005 ¶¶ 4, 6, 9, 17, 21).

Patent Owner counters that Haberman fails to disclose key elements of the claims. PO Resp. 26–35; *see also* PO Sur-reply 12–20. Patent Owner further contends that Petitioner's combination of Haberman with Boger "was for Boger's disclosure of using device addressing in a particular computer architecture called piconet," wherein a POSITA "would not have combined Boger with Haberman." PO Resp. 35–36; PO Sur-reply 20–21.

We summarize the asserted prior art below.

1. Haberman (Ex. 1004)

Haberman, titled "Transmitter at Specific Address Transmitting Address-Specific Information Content," discloses a method "for presenting to a person using a mobile device information content pertaining to a specific address when the mobile device is within proximity to the specific address." Ex. 1004, codes (54), (57). The method includes transmitting from the specific address a transmission containing a broadcast, wherein the broadcast includes informational content that pertains to the specific address for presenting to a person using the mobile device. *Id.* at code (57). In one aspect, the informational content is presented to the person for the respective broadcast determined to be within a predetermined proximity to the mobile device. *Id.* ¶ 29.

In a feature, the method includes storing a preferences profile from a person using the mobile device, wherein the preferences profile indicates types of informational content with which the person using the mobile device desires to be presented. *Id.* ¶ 34. If the type of informational content

does not match a type of informational content indicated in the preferences profile, then the informational content of the respective broadcast may be presented to the person using the mobile device. *Id.* An illustration of a mobile device that stores a preferences profile is depicted in Figure 14, reproduced below:

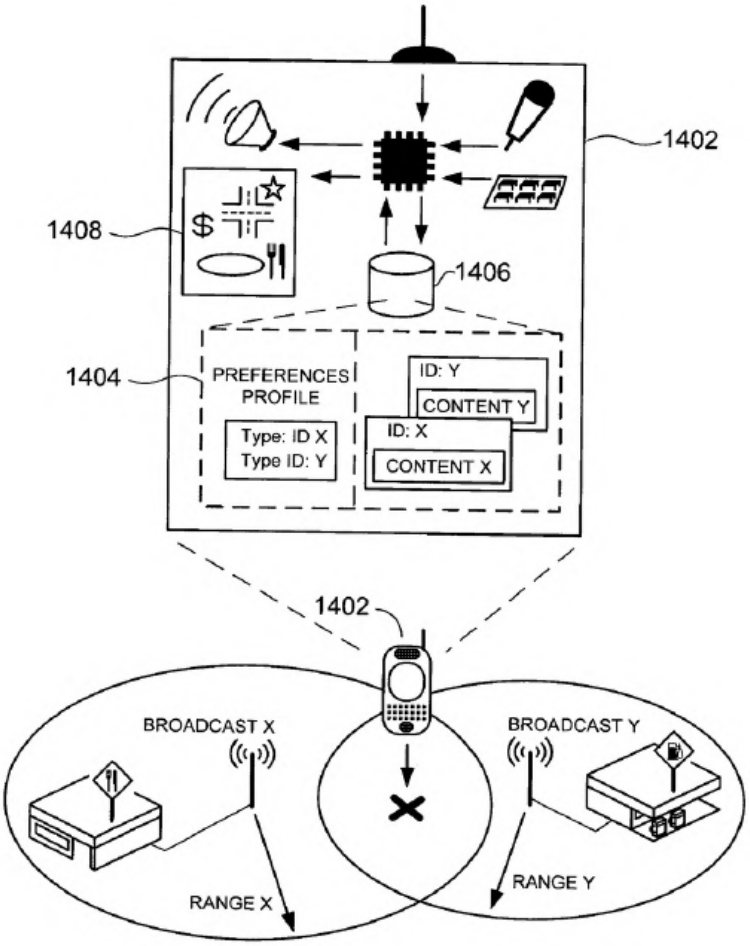

FIG. 14

Figure 14 shows a mobile device comprising "smart phone" 1402 with preferences profile 1404 stored therein. *Id.* ¶ 166. As shown in Figure 14, when a user selects content types "X" and "Y" for storing in the mobile device, broadcast "X" and broadcast "Y" are received and stored in database

1406, and are maintained in non-volatile memory of the mobile device. *Id.* In Figure 14, the user of the mobile device selects broadcast "X" from a list of stored broadcasts, for presentation of the informational content for the restaurant that is of current interest. *Id.*

2. Boger (Ex. 1005)

Boger, titled "Masterless Slave/Master Role Switch in a Bluetooth Piconet," discloses a method by which "a new Bluetooth piconet is established among participants of an old Bluetooth piconet whose master has disappeared." Ex. 1005, codes (54), (57). A piconet is defined as a network of one master and one or more slaves. *Id.* ¶ 4.

The frequency hopping scheme and the channel access code of a piconet is defined based on the Bluetooth device address (BD_ADDR) of the master of the piconet. *Id.* ¶ 6. During formation of the piconet, the master assigns each slave an active member address (AM_ADDR), an integer from 1 through 7, which uniquely identifies the slave within the piconet. *Id.*

Transmission is done in packets that are made up of an access code, a packet header and a payload, wherein the packet header includes information for package acknowledgement and the AM_ADDR of the device for which the packet is intended. *Id.* ¶ 9. The master of a piconet uses the AM_ADDR to direct a packet to one of the slaves of the piconet, wherein a slave responds only to packets addressed to it. *Id.* ¶ 17.

3. Analysis

Having reviewed Petitioner's arguments and supporting evidence in the complete record, we determine Petitioner has demonstrated by a preponderance of the evidence that claims 1 and 24, and claims 2, 5, 20, 25,

28, 43 respectively depending therefrom, would have been obvious over the combination of Haberman and Boger, notwithstanding Patent Owner's arguments to the contrary. We address in detail Petitioner's arguments and Patent Owner's responses regarding Haberman and Boger with respect to the limitations of independent claims 1 and 24.

> i. "accepting user input, from a user of a mobile application user interface of a user carried mobile data processing system, . . . wherein the mobile data processing system uses the user specified location based event configuration to perform mobile data processing system operations"

Relying on the testimony of Dr. La Porta for support, Petitioner presents evidence that Haberman describes a user storing "a preferences profile (i.e., user-specified location based event configuration to be monitored and triggered by the mobile data processing system) that 'represents the types of informational content with which the person using the mobile device desires to be presented.'" Pet. 13–14 (citing Ex. 1004 ¶¶ 25, 176, 181; Ex. 1002 ¶ 65) (emphasis omitted); *see also* Pet. Reply 5–8. According to Petitioner, in Haberman, the mobile device accepts user input to generate the preferences profile, wherein the user can select the types of information content that are preferred using a user interface of the mobile device. Pet. 14 (citing Ex. 1004 ¶ 121; Ex. 1002 ¶ 66).

Petitioner contends that Haberman's preferences profile is "location-based," wherein, for example, "the broadcast includes both informational content pertaining to a particular location for presentation to a person and broadcast-identifying information comprising a broadcast identification." *Id.* (quoting Ex. 1004 ¶ 16). Petitioner then contends that Haberman's mobile device "monitors the preferences profile to determine when to store

or present content (*uses the user specified location based event configuration* to perform mobile data processing system operations)," such as, for example, "upon receiving 'a plurality of transmission from wireless transmitters,' the mobile device scans each respective broadcast 'to determine if the informational content thereof matches informational content identified as being preferred,' [i.e., the preferences profile]." *Id.* at 15 (citing Ex. 1004 ¶ 168; Ex. 1002 ¶ 68).

Patent Owner counters that "this claim limitation 'recit[es] configuring privilege data,'" wherein "[t]he disclosed preference profile of Haberman fails to disclose the claimed limitation related to 'configuring privilege data,' because a 'preference' is a wholly different concept from a 'privilege' (or a 'permission')." PO Resp. 26–27. Patent Owner acknowledges that "[t]here is no dispute that Haberman discloses the establishing of a 'preference profile,'" but contends that "nowhere in [Petitioner's] cited portions of Haberman is there any discussion of a user configuring a privilege or a permission." *Id.* at 28 (citing Pet. 13, 51, 59: Ex. 1002, 26, 47, 65).

Patent Owner's contentions are based on its proposed construction that "the subject claim limitation recites configuring privilege data" (PO Resp. 22), which we do not adopt, as discussed *supra* § II(B)(1). Although embodiments of the '868 patent relate to privilege data, the '868 patent does not provide a definition for "user specified location based configuration" as limited to "privilege data." Because we do not adopt Patent Owner's proposed claim construction, Patent Owner's argument that Haberman fails to disclose "configuring privilege data" (PO Resp. 26–27) does not undermine Petitioner's showing that Haberman discloses "a preferences

profile (i.e., user-specified location based event configuration to be monitored and triggered by the mobile data processing system)." Pet. 13–14. In fact, Patent Owner acknowledges that "[t]here is no dispute that Haberman discloses the establishing of a 'preference profile.'" PO Resp. 28.

We credit Dr. La Porta's testimony that Haberman teaches a mobile device that "*uses the user specified location based event configuration to perform mobile data processing system operations*," as specifically claimed, because Haberman's mobile device 108 "monitors the preference profile to determine when to store or present content." Ex. 1002 ¶ 68 (citing Ex. 1004 ¶ 168). Dr. La Porta's testimony is consistent with Haberman's teaching that, upon receiving a plurality of transmissions from wireless transmitters, the mobile device scans each respective broadcast to determine if the informational content thereof matches informational content identified as being preferred (i.e., matches location based preferences profile), and presents the informational content to the user if the informational content is a preferred informational content. Ex. 1004 ¶ 168; Fig. 9.

Based on the complete record presented, we are persuaded that Petitioner has demonstrated that Haberman in view of Boger teaches "accepting user input, from a user of a mobile application user interface of a user carried mobile data processing system, . . . wherein the mobile data processing system uses the user specified location based event configuration to perform mobile data processing system operations," as recited in claims 1 and 24.

ii. "accessing at least one memory storing a first identifier and a second identifier and a third identifier" "each identifier is determined by the mobile data processing system for at least one location based condition monitored by the mobile data processing system . . . triggering a location based action," "the first identifier indicative of the mobile data processing system of the mobile application user interface," "the second identifier indicative of originating data processing system identity data of the wireless data record received for processing," "the third identifier indicative of the originating data processing system of the wireless data record received for processing"

Petitioner presents evidence that Haberman teaches storing the user's preferences profile in a memory. Pet. 16–17 (citing Ex. 1004 ¶¶ 25, 166). Further, Petitioner presents evidence that Haberman's preferences profile includes at least three identifiers: 1) an internal ID associated with the mobile device or GPS location information (i.e., first identifier); 2) a transmitting party identification (i.e., a second identifier); and 3) a broadcast identification that represents the author of the informational content (i.e., a third identifier). Pet. 17–21 (citing Ex. 1004 ¶¶ 27, 29, 33, 36, 47, 132).

"first identifier"

As to claim limitation "first identifier," Petitioner contends that Haberman teaches an internal ID that "refers to an identifier that uniquely identifies the mobile device." Pet. 17. For example, according to Petitioner, Haberman's "informational content may include, inter alia, an Internet address," and thus, "***the mobile device preferably is Internet-enabled***." *Id.* (citing Ex. 1004 ¶ 132). In its Reply, Petitioner clarifies that, because "Haberman discloses that the mobile device is an Internet-enabled device

that is capable of downloading content from an Internet address," "the mobile device must have an IP address, which identifies the mobile device." Pet. Reply 10. Relying on Dr. La Porta's supporting testimony, Petitioner contends that, in Haberman, the mobile device uses the internal identifier to compare to identifier data for the wireless data record, wherein "the Internet enabled mobile device of the user can be used to download additional content from the Internet address." Pet. 17–18 (citing Ex. 1002 ¶ 73).

Alternatively, Petitioner contends that Haberman's GPS location information also teaches the "first identifier" because it is "*indicative of* the mobile device" and is compared with positional data in a broadcast. Pet. 18–19 (citing Ex. 1004 ¶¶ 29, 33 47). According to Petitioner, "[t]he instituted claims only require that the first identifier be 'indicative of the mobile data processing system." Pet. Reply 11.

Petitioner then contends that, to the extent Haberman does not explicitly teach the first identifier, "Boger teaches an AM_ADDR associated with the mobile device (first identifier)." Pet. 34 (citing Ex. 1002 ¶ 114). According to Petitioner, "[t]he AM_ADDR uniquely identifies the device for which the packet is intended," "is assigned to each mobile device by the master," "is stored in the memory of the mobile device," wherein "the mobile device uses the AM_ADDR *in comparing the first identifier to the identifier data* (e.g., the packet information) *determined by the mobile device for transmission received by the mobile device*." *Id.* at 35–36 (citing Ex. 1005 ¶¶ 6, 17, 21; Ex. 1002 ¶¶ 117–119). Relying on the supporting testimony of Dr. La Porta, Petitioner contends that it would have been obvious to a POSITA that, "in a Bluetooth implementation of Haberman," a mobile device in Haberman "would include an AM_ADDR of the device for

communication in the Bluetooth environment," wherein the POSITA would have been motivated to combine the teachings of Boger with Haberman "because Haberman teaches explicitly that transmission between the transmitter and the mobile device may be done [with] Bluetooth and Boger explains the details of the piconet topology of the Bluetooth protocol." *Id.* at 36 (citing Ex. 1002 ¶¶ 120–121).

Patent Owner argues that Haberman's "Internet address has nothing to do with the mobile device," is "not an identifier of the transmitter of the wireless data record, let alone the mobile device," and instead, "is essentially a webpage link included in the advertisement sent, so that a mobile device user can click on the address via an Internet browser." PO Resp. 32–33 (citing Ex. 1004 ¶ 132). Although Patent Owner acknowledges Petitioner's contention that "the mobile devices disclosed in Haberman are 'Internet enabled,' and necessarily have an IP address," and agrees that "an Internet enabled device would have an IP address" (PO Sur-reply 17), Patent Owner argues that Petitioner "fails to address whether it is a privilege based identifier, or an equivalent thereof." *Id.*

Patent Owner further contends that Haberman's GPS information "does nothing more than indicate a longitude and latitude for the GPS enabled device." PO Resp. 33–34 (citing Ex. 2008 ¶ 98). According to Patent Owner, "Dr. La Porta admits that the 'first identifier' must identify the mobile device." *Id.* at 33 (citing Ex. 2010, 23:23–25:14). Patent Owner contends that Dr. La Porta further "admits that GPS data does not identify the mobile device, and instead, only indicates a location." *Id.* at 34 (citing Ex. 2010, 95:20–96:10).

Patent Owner does not specifically address Petitioner's contention that, to the extent Haberman does not explicitly teach the first identifier, Boger teaches such identifier. Pet. 34; *see generally* PO Resp. Instead, Patent Owner contends that the combination of Boger was "for Boger's disclosure of using device addressing in a particular computer architecture [ ] piconet, and the incorporation of such addressing into Haberman." PO Resp. 35–36. According to Patent Owner, "the conflicting objects of Haberman and Boger establish that a person of skill in the art would not have combined their teachings." *Id.* at 36. Patent Owner contends that a POSITA "would not have combined the device addressing of Boger, which is for the purpose of re-establishing a network of devices, with Haberman, which teaches that networks are not established, and no address is assigned to a mobile device." *Id.* at 38 (citing Ex. 2008 ¶¶ 104–114).

We agree with Patent Owner's contention that Haberman's "Internet address" is "not an identifier of the transmitter of the wireless data record." PO Resp. 32–33. As indicated in our Decision to Institute, Haberman describes the "Internet address" as "indicative of server 306, not the mobile device." Dec. Inst. 17; *see also* Ex. 1004 ¶ 132. Furthermore, as discussed above in the claim construction section, § II(B)(3), we decline to adopt Petitioner's proposed construction that the "first identifier" stored in memory encompasses obtained "GPS information" that is merely "indicative" of the mobile device. Pet. Reply 12. Accordingly, we also agree with Patent Owner that Haberman's "GPS information" cannot be an "identifier" of the mobile device. PO Resp. 32–34.

However, on the complete record at trial, we determine that Petitioner has demonstrated by a preponderance of the evidence that the combination

of Haberman and Boger teaches a "first identifier indicative of the mobile data processing system of the mobile application user interface," as recited in claims 1 and 24.

As Patent Owner points out, Petitioner contends that Haberman's "Internet enabled" mobile device would "necessarily have an IP address" that identifies the mobile device, and Patent Owner even agrees that "an Internet enabled device would have an IP address." PO Sur-reply 17. We agree with Petitioner's contention, with which Patent Owner agrees, that Haberman's Internet-enabled mobile device comprises an "internal ID (*first identifier*)," such as an IP address, that identifies the mobile device. Pet. 17; Pet. Reply 10.

We are unpersuaded by Patent Owner's argument that Petitioner "fails to address whether [the IP address] is a privilege based identifier, or an equivalent thereof." PO Sur-reply 17. As discussed *supra* § II(B)(1), we do not adopt Patent Owner's proposed construction that "the subject claim limitation recites configuring privilege data." PO Resp. 22. As Petitioner points out, the claims do not recite "privilege data." Pet. Reply 2. That is, the claims do not require that the "first identifier" be "privilege based" (PO Sur-reply 17), but rather, be an "identifier" that is indicative of mobile device ("the mobile data processing system of the mobile application user interface"). Ex. 1001, 283:55–284:65.

Furthermore, we agree with Petitioner's further reliance on Boger for teaching "an AM_ADDR associated with the mobile device (first identifier)," "[t]o the extent Haberman does not explicitly teach the first identifier" (Pet. 34 (citing Ex. 1002 ¶ 114)), which Patent Owner does not specifically address. *See generally* PO Resp.; PO Sur-reply. We are

persuaded by Petitioner's showing, which is supported by Dr. La Porta's testimony, that Boger's AM_ADDR "uniquely identifies the device for which the packet is intended," "is assigned to each mobile device," "is stored in the memory of the mobile device," wherein the mobile device uses the AM_ADDR to compare with packet information for transmission. Pet. 35–36 (citing; Ex. 1002 ¶¶ 117–119). Further, as Petitioner points out, like Boger, Haberman's transmission "may include . . . a Bluetooth transmission." Pet. Reply 15 (citing Ex. 1004 ¶ 73). Petitioner's contentions and Dr. La Porta's supporting testimony are consistent with Haberman's and Boger's teachings. *See* Ex. 1005 ¶¶ 6, 17, 21, 73.

We are unpersuaded by Patent Owner's contention that a POSITA would not have combined the device addressing of Boger, "which is for the purpose of re-establishing a network of devices," with Haberman, in which "no address is assigned to a mobile device." PO Resp. 38. Here, Patent Owner agrees with Petitioner that Haberman's Internet enabled device "would have an IP address" assigned to the mobile device. *See* PO Sur-reply 17. Although Patent Owner also points to an embodiment in Haberman that provides that "no IP address is assigned to the mobile device 108 by the transmitter 102 as occurs when the wireless device registers with a WAN computer network" (PO Resp. 37 (citing Ex. 1004 ¶ 19)), as Petitioner points out, Patent Owner's cited portion of Haberman "references an embodiment in which a wide area network (WAN) is implemented." Pet. Reply 15. As Petitioner clarifies, Petitioner is relying on Haberman's "Bluetooth network" embodiment, not Haberman's WAN computer network, for the combination with Boger. *Id.*

We are persuaded by Petitioner's contention that Haberman's Internet-enabled mobile device comprises an "internal ID" assigned to the mobile device. Pet. 17; Pet. Reply 10. Further, as Petitioner points out, both Haberman and Boger are directed to Bluetooth transmissions (Pet. Reply 15 (citing Pet. 35–43; Ex. 1004 ¶ 73)), wherein Boger discloses an internal ID, such as an AM_ADDR, assigned to the mobile device to compare with packet information for Bluetooth transmission. Pet. 35–36 (citing Ex. 1002 ¶¶ 117–119).

We are also persuaded by Petitioner's showing, and credit Dr. La Porta's supporting testimony, that it would have been obvious to a POSITA that Haberman's mobile device would include an AM_ADDR as the internal ID of the mobile device for communication in the Bluetooth environment, wherein a POSITA would have been motivated to combine the teachings of Haberman, which teaches "explicitly that transmission between the transmitter and the mobile device may be done with Bluetooth," with the teachings of Boger, which "explains the details of the piconet topology of the Bluetooth protocol." Pet. 36 (citing Ex. 1002 ¶¶ 120–121). That is, we agree a POSITA "would be motivated to combine Boger's teachings that describe a typical arrangement of a Bluetooth network and a transmission in a Bluetooth network with the system of Haberman." Pet. Reply 15 (citing Pet. 35–43; Ex. 1004 ¶ 73).

On this record, we find Petitioner has persuasively established that a POSITA would have found it obvious to modify Haberman's mobile device to include an AM_ADDR, such as that detailed in Boger, as the internal ID of the mobile device for communication in the Bluetooth environment. Pet. Reply 15.

"second identifier" and "third identifier"

As to the claim limitation "second identifier," Petitioner presents evidence that Haberman teaches a transmitting party identification that is indicative of the broadcast transmitter and is compared to the user's preferences profile. Pet. 19–20 (citing Ex. 1004 ¶¶ 27, 36).

As to the claim limitation "third identifier," Petitioner presents evidence that Haberman teaches a broadcast identification that is indicative of the broadcast's author and is compared to the user's preferences profile. Pet. 20–21 (citing Ex. 1004 ¶ 27). Petitioner contends that, to the extent Haberman does not explicitly teach the third identifier, Boger teaches a third identifier. *Id.* at 34, 37–40. In particular, Petitioner contends that "[t]he 'access code' of Boger corresponds to the claimed third identifier," wherein the access code "is indicative of the overall originating data processing system (e.g., the piconet)," "is stored local to the mobile," and "is used by the mobile device *in comparing the third identifier to the wireless data record received for processing* by the mobile device." *Id.* at 38–39 (citing Ex. 1005 ¶ 6; Ex. 1002 ¶¶ 126–128). According to Petitioner, it would have been obvious to a POSITA that, "in a Bluetooth implementation of Haberman," a user of a mobile device "could define, as a preference, access codes of piconets from which the user would prefer to process transmissions." *Id.* at 39 (citing Ex. 1002 ¶¶ 129–131).

Patent Owner contends that the claimed "identifiers are properly understood to [be] related to configured privilege data," wherein "Haberman fails to describe either the second or third identifiers because it does not describe that these constitute configured privilege data." PO Resp. 34. Further, with respect to "third identifier," Patent Owner contends that

"Haberman specifies that the 'transmitting party identification' and the 'broadcaster identification' identify different devices," and does not disclose that "the device of the author of the informational content is the same device that transmits the broadcast." *Id.* at 35 (citing Ex. 2008 ¶¶ 100–103).

Patent Owner does not specifically address Petitioner's contention that, to the extent Haberman does not explicitly teach the third identifier, Boger teaches such identifier. Pet. 34; *see generally* PO Resp. Patent Owner also does not provide arguments regarding the combination of Haberman and Boger with respect to a "third identifier" separate from those with respect to a "first identifier," i.e., that a POSITA "would not have combined the device addressing of Boger, which is for the purpose of re-establishing a network of devices, with Haberman, which teaches that networks are not established, and no address is assigned to a mobile device." PO Resp. 38 (citing Ex. 2008 ¶¶ 104–114).

We are unpersuaded by Patent Owner's argument that "Haberman fails to describe either the second or third identifiers because it does not describe that these constitute configured privilege data." PO Resp. 34. As discussed above, the claims do not recite "privilege data." *Id.* That is, we agree with Petitioner that the claims do not require that the "second identifier" and "third identifier" be "configured privilege data" (*id.*), but rather, be an identifier that is indicative of the transmitting party ("originating data processing system identity data of the wireless data record received for processing") and the author of the broadcasted informational content ("originating data processing system of the wireless data record received for processing"), respectively. *See id.*; *see also* Ex. 1001, 283:55–284:65.

We are also unpersuaded by Patent Owner's contention regarding the "third identifier" that Haberman does not disclose that "the device of the author of the informational content is the same device that transmits the broadcast." PO Resp. 35. That is, claims 1 and 24 do not require that the "device" of the author of the informational content is the same "device" that transmits the broadcast. *See* Ex. 1001, 283:55–284:65. Instead, we agree with Petitioner that claims 1 and 24 "only require that the second identifier be indicative of originating data processing **system** identity data of the wireless data record and the third identifier be indicative of the originating data processing **system** of the wireless data record." Pet. Reply 14.

Haberman's system transmits from the specific address a transmission containing a broadcast, wherein the broadcast includes informational content that pertains to the specific address for presenting to a person using the mobile device. Ex. 1004, code (57). Further, as Petitioner points out, Haberman discloses that each transmission "contains a transmitting party identification" and furthermore, each broadcast in the transmission "includes . . . broadcast-identifying information." Pet. Reply 13–14 (citing Ex. 1004 ¶ 27). We agree with Petitioner that, as shown in this passage, the transmitting party identification and the broadcaster identification originate from Haberman's same system. *Id.*

Furthermore, we are persuaded by Petitioner's showing that Boger teaches the third identifier to the extent Haberman does not explicitly teach such identifier. Pet. 34. Patent Owner does not address Petitioner's contention. *See generally* PO Resp.

As discussed above regarding the "first identifier," we agree with Petitioner that a POSITA "would be motivated to combine Boger's

teachings that describe a typical arrangement of a Bluetooth network and a transmission in a Bluetooth network with the system of Haberman." Pet. Reply 15 (citing Pet. 35–43; Ex. 1004 ¶ 73). On this record, we find Petitioner has persuasively established that a POSITA would have found it obvious that Haberman's mobile device includes an access code, such as that detailed in Boger, in determining whether a transmission in the Bluetooth environment is from a particular piconet. Pet. Reply 38. Petitioner's contentions are consistent with the teachings of Haberman and Boger. *See* Ex. 1004 ¶ 27; Ex. 1005 ¶ 6.

Accordingly, on the complete record before us, we determine that Petitioner has demonstrated by a preponderance of the evidence that the combination of Haberman and Boger teaches a "second identifier indicative of originating data processing system identity data of the wireless data record received for processing," and a "third identifier indicative of the originating data processing system of the wireless data record received for processing," as recited in claims 1 and 24.

> *"each identifier is determined . . . for at least one location based condition . . . triggering a location based action"*

Petitioner then presents evidence that Haberman's "identifiers are used for determining when a location-based action is triggered." Pet. 22. Although Patent Owner does not present arguments in its Response addressing the merits of Petitioner's contentions with respect to this claim limitation (see generally PO Resp.), the burden remains on Petitioner to demonstrate unpatentability. *See Dynamic Drinkware, LLC v. Nat'l Graphics, Inc.*, 800 F.3d 1375, 1378 (Fed. Cir. 2015). On this complete record, we determine that Petitioner has demonstrated by a preponderance of

the evidence that the combination of Haberman and Boger teaches that each identifier is determined for at least one location based condition, "triggering a location based action," as recited in claims 1 and 24.

Here, we are persuaded by Petitioner's showing that Haberman's mobile device 108 determines the identifier data for the wireless data record as part of a screening/comparison process for identifying whether information in the broadcast is preferred, and presents the broadcast's informational content to the user based on determining that information in the broadcast matches informational content identified as being preferred. Pet. 21–26 (citing Ex. 1004 ¶¶ 16, 27, 36, 47, 66, 120, 129, 132, 168).

Accordingly, based on the complete record presented, we are persuaded that Petitioner has demonstrated that the combination of Haberman and Boger teaches "accessing at least one memory storing a first identifier and a second identifier and a third identifier," "each identifier is determined by the mobile data processing system for at least one location based condition monitored by the mobile data processing system for the mobile data processing system triggering a location based action," "the first identifier indicative of the mobile data processing system of the mobile application user interface," "the second identifier indicative of originating data processing system identity data of the wireless data record received for processing," and "the third identifier indicative of the originating data processing system of the wireless data record received for processing," as recited in claims 1 and 24.

iii. "receiving for processing the wireless data record corresponding to the beaconed broadcast wireless data transmission that is beaconed outbound from the originating data processing system to the destination data processing system" "determining the identifier data for the wireless data record received for processing by the mobile data processing system," "comparing the identifier data for the wireless data record received for processing by the mobile data processing system with the third identifier and the at least one of the first identifier and the second identifier."

Petitioner contends that Haberman's mobile device 108:

> includes a receiver 112 for receiving wireless transmission such as transmission 104 and is configured to receive the transmission 104 (*wireless data record*) from the wireless transmitter 102 (originating data processing system) when the mobile device 108 (destination data processing system) comes within transmission range 110 of the transmitter 102.

Pet. 26 (citing Ex. 1004 ¶ 120; Ex. 1002 ¶ 91).

According to Petitioner, the transmission originating at wireless transmitter 102 is "a beaconed broadcast wireless data transmission," wherein "[t]he wireless data record corresponds to the beaconed broadcast wireless data transmission," and "[t]he broadcast contained within the transmission includes informational content for presentation to a person." Pet. 26 (citing Ex. 1004 ¶ 8; Ex. 1002 ¶¶ 92–93). Petitioner also presents evidence that, in Haberman, each transmission contains a "***transmitting party identification***," and "broadcast identifying information," wherein the transmitting party identification and the broadcast identifying information are "representative of the 'identifier data' in the transmission." Pet. 24–25 (citing Ex. 1004 ¶¶ 27, 129; Ex. 1004 ¶ 89).

Petitioner further presents evidence that Haberman teaches presenting the broadcast's informational content to the user when the user's preferences profile matches the broadcast's transmitting party identification and broadcast identification (i.e., the second and third identifiers). Pet. 23–27 (citing Ex. 1004 ¶¶ 27, 36, 129, 168). According to Petitioner, in Haberman, the informational content of a respective broadcast may be presented to the user if the transmitting party identification matches a transmitting party identification (i.e., second identifier) indicated in the preferences profile. *Id.* at 23–25 (Ex. 1004 ¶¶ 27, 36; Ex. 1002 ¶¶ 85, 89). Similarly, Haberman's broadcast's informational content may be presented to the user when the user's preferences profile matches the broadcast identifying information (i.e., third identifier). *Id.* at 25 (citing Ex. 1004 ¶ 129; Ex. 1002 ¶ 89). Thus, according to Petitioner, Haberman teaches that "at least two of the identifiers—the second identifier and the third identifier . . . –are processed," i.e., "***screening broadcaster identifications and broadcast identifications against the received preferences profile*** to determine whether informational content of a respective broadcast is to be stored within the mobile device." *Id.* (quoting Ex. 1004 ¶ 27).

Patent Owner responds that the claimed "identifier data" is "explained in the '868 Patent specification in terms of a grantee identity," and is "a feature of the mobile data processing system that confirms a privilege granted to the sender of the wireless data record." PO Resp. 31 (citing Ex. 1001, 283:64–284:12). Thus, Patent Owner argues that "Petitioner fails to demonstrate that Haberman discloses the properly construed limitation." *Id.*

Patent Owner again is basing its contentions on its proposed construction that "the subject claim limitation recites configuring privilege

data" (PO Resp. 22), which we do not adopt. Here, claims 1 and 24 do not recite "grantee identity" or "a privilege granted to the sender of the wireless data record." *Id.* at 31.

As Petitioner points out, Haberman's mobile device is configured to receive a transmission from a wireless transmitter when the mobile device comes within a transmission range of the transmitter. *See* Ex. 1004 ¶ 8. In Haberman, each transmission contains a transmitting party identification. *Id.* ¶ 27. Further, each broadcast includes broadcast-identifying information that identifies or describes the broadcast. *Id.* ¶ 129. The broadcast's informational content is presented to the user when the user's preferences profile matches the broadcast's transmitting party identification or the broadcast identifying information. *Id.* ¶ 168.

Based on the complete record presented, we are persuaded that Petitioner has demonstrated that Haberman in view of Boger teaches "receiving for processing the wireless data record corresponding to the beaconed broadcast wireless data transmission that is beaconed outbound from the originating data processing system to the destination data processing system" "determining the identifier data for the wireless data record received for processing by the mobile data processing system," "comparing the identifier data for the wireless data record received for processing by the mobile data processing system with the third identifier and the at least one of the first identifier and the second identifier," as recited in claims 1 and 24.

iv. "determining the at least one location based condition of the user specified location based event configuration," "performing, upon the determining the at least one location based condition, the location based action in accordance with the determining the at least one location based condition . . . including whether the identifier data for the wireless data record . . . matches the third identifier and the at least one of the first identifier and the second identifier"

Relying on Dr. La Porta's testimony for support, Petitioner presents evidence that the combination of Haberman and Dober teaches "determining the at least one location based condition" and "performing, upon the determining . . ., the location based action." Pet. 27 (citing Ex. 1002 ¶ 96). Although Patent Owner does not present arguments in its Response addressing the merits of Petitioner's contentions with respect to these claim limitations (*see generally* PO Resp.), the burden remains on Petitioner to demonstrate unpatentability. *See Dynamic Drinkware*, 800 F.3d at 1378.

As discussed above, Haberman's mobile device determines when the mobile device comes within a transmission range of a transmitting wireless transmitter. *See* Ex. 1004 ¶ 8. In Haberman, the mobile device determines whether the user's preferences profile matches the broadcast's transmitting party identification or the broadcast identifying information. *Id.* ¶¶ 27, 129. The broadcast's informational content is presented to the user when the user's preferences profile matches the broadcast's transmitting party identification or the broadcast identifying information. *Id.* ¶ 168.

Based on the complete record presented, we are persuaded that Petitioner has demonstrated by a preponderance of the evidence that Haberman in view of Boger teaches "determining the at least one location

based condition of the user specified location based event configuration," "performing, upon the determining the at least one location based condition, the location based action in accordance with the determining the at least one location based condition . . . including whether the identifier data for the wireless data record . . . matches the third identifier and the at least one of the first identifier and the second identifier," as recited in claims 1 and 24.

4. Claims 2, 5, 20, 25, 28, and 43

Dependent claims 2, 5, 20, 25, 28, and 43 depend, directly or indirectly, from claims 1 or 24. Petitioner presents evidence that the combination of Haberman teaches the limitations of claims 2, 5, 20, 25, 28, and 43. Pet. 28–32. Although Patent Owner does not present arguments in its Response addressing the merits of Petitioner's contentions with respect to these claims (*see generally* PO Resp.), the burden remains on Petitioner to demonstrate unpatentability. *See Dynamic Drinkware*, 800 F.3d at 1378.

Here, as to claim 2 and 25, Petitioner presents evidence that Haberman teaches that "the transmitting identification ('second identifier') grants the location based action to an identifier of the mobile device (first identifier[])]," wherein, "[f]ollowing a determination that at least the transmitting identification matches a preference in the preference profile, Haberman grants the location-based action to the firs identifier." *Id.* at 28 (citing Ex. 1004 ¶ 168; Ex. 1002 ¶¶ 97–98). As to claims 5 and 28, Petitioner presents evidence that the informational content in the transmission "benefits the user of the mobile device." *Id.* at 29 (citing Ex. 1004 ¶ 125; Ex. 1002 ¶¶ 100–101). As to claims 20 and 43, Petitioner presents evidence that Haberman teaches that "a group of users are able to receive transmission from a wireless transmitter," such as "mobile devices

within range of a wireless transmitter," and thus, "the IP address of mobile device [] (first identifier) represents a group (at least one user device) that is within range of the wireless transmitter." *Id.* at 30 (citing Ex. 1004 ¶¶ 9, 27, 206; Ex. 1002 ¶¶ 102–104). Furthermore, according to Petitioner, "[t]he transmitting party identification (i.e., the third identifier) also identifies a group. *Id.* at 31 (citing Ex. 1004 ¶¶ 27, 131; Ex. 1002 ¶ 105).

Based on the complete record presented, we are persuaded that Petitioner has demonstrated that the combination of Haberman and Boger teaches the subject matter of dependent claims 2, 5, 20, 25, 28, ad 43.

5. Summary

For the foregoing reasons, Petitioner has persuasively demonstrated that the combination of Haberman and Boger teaches the subject matter of claims 1, 2, 5, 20, 24, 25, 28, and 43.

E. Obviousness of Claims 1, 2, 5, 20, 24, 25, 28, and 43 over Haberman (Ground 1)

Petitioner argues that claims 1, 2, 5, 20, 24, 25, 28, and 43 would have been obvious over Haberman. Pet. 7–32. Patent Owner addresses Haberman with the same arguments discussed above for the obviousness ground based on Haberman and Boger (Ground 2). *See generally* PO Resp. 25–34. Because the Haberman-Boger obviousness ground (ground 2) is dispositive as to all challenged claims (*see supra* § II(D)), we do not reach Petitioner's challenge based on obviousness over Haberman. *See SAS Inst. Inc. v. Iancu*, 138 S. Ct. 1348, 1359 (2018) (holding a petitioner "is entitled to a final written decision addressing all of the claims it has challenged"); *Bos. Sci. Scimed, Inc. v. Cook Grp. Inc.*, 809 F. App'x 984, 990 (Fed. Cir. 2020) (non-precedential) (recognizing that "[t]he Board has the discretion to

decline to decide additional instituted grounds once the petitioner has prevailed on all its challenged claims").

F. Other Asserted Grounds

Petitioner contends that claims 1, 2, 5, 20, 24, 25, 28, and 43 of the '868 patent also are obvious over Haberman and Evans (Ground 3), and over Haberman, Boger and Evans (Ground 4). *See* Pet. 49–63. Patent Owner responds with that "Petitioner's Grounds 3 and 4 are inapplicable." *See generally* PO Resp. 38–39.

Because the Haberman and Boger obviousness ground (Ground 2) is dispositive as to all challenged claims (*see supra* § II(D)), we do not reach Petitioner's challenge based on obviousness over Haberman and Evans, or Haberman, Boger and Evans. *See SAS*, 138 S. Ct. at 1359.

G. Objective Indicia of Nonobviousness

Patent Owner asserts that objective evidence of nonobviousness demonstrates that the challenged claims were not obvious. *See* PO Resp. 40–48. We have considered Patent Owner's evidence concerning objective indicia of non-obviousness as a part of this decision. *See Apple Inc. v. Samsung Elecs. Co.*, 839 F.3d 1034, 1047–48 (Fed. Cir. 2016) (en banc). Objective evidence of non-obviousness "may often be the most probative and cogent evidence in the record" and "may often establish that an invention appearing to have been obvious in light of the prior art was not." *Transocean Offshore Deepwater Drilling, Inc. v. Maersk Drilling USA, Inc.*, 699 F.3d 1340, 1349 (Fed. Cir. 2012) (citation omitted). For such evidence to have substantial weight, however, "its proponent must establish a nexus between the evidence and the merits of the claimed invention." *ClassCo, Inc. v. Apple, Inc.*, 838 F.3d 1214, 1220 (Fed. Cir. 2016). "[T]here

is no nexus unless the evidence presented is 'reasonably commensurate with the scope of the claims.'" *Id.* (quoting *Rambus Inc. v. Rea*, 731 F.3d 1248, 1257 (Fed. Cir. 2013)). The patentee "bears the burden of showing that a nexus exists." *WMS Gaming, Inc. v. Int'l Game Tech.*, 184 F.3d 1339, 1359 (Fed. Cir. 1999). We address Patent Owner's arguments below.

1. Copying

Patent Owner suggests that evidence of copying supports that the challenged claims are not obvious. PO Resp. 40–45. According to Patent Owner, copying "can be shown inferentially based on evidence of access," wherein, we should infer copying based on "Petitioner's access to the '868 Patent and its subsequent development of infringing devices." *Id.* at 40 (citing *Liqwd, Inc. v. L'Oreal USA, Inc.*, 941 F.3d 1133, 1138 (Fed. Cir. 2019)).

As the court in *Liqwd* recognized, access to a patent coupled with circumstantial evidence showing changes to a competitor's design can be sufficient to support copying. *Liqwd, Inc.*., 941 F.3d at 1138. This may happen when, for example, "the defendant's engineering design team had settled on one design and 'suddenly changed direction' to adopt a feature disclosed in the patent as soon as it issued." *Id.* (quoting *DePuy Spine, Inc. v. Medtronic Sofamor Danek, Inc.*, 567 F.3d 1314, 1328 (Fed. Cir. 2009)).

Here, we find the circumstantial evidence is not sufficient to suggest that Petitioner copied the patented technology. As Petitioner notes, the only alleged access involves unsolicited communications that inventor William Johnson sent to Petitioner's agent between 2010 and 2014, seeking to monetize Patent Owner's then-pending patent applications. *See* Pet. Reply 17; PO Resp. 40–42.

Patent Owner merely alleges that "[i]n or around June 2013," Petitioner "publicly announced its rollout of iOS7 and its BLE iBeacon initiative," which included "Petitioner's iBeacon protocol, a technology standard for enabling location awareness for interaction of devices" (PO Resp. 42); and that at least claims 1 and 24 of the '868 patent "cover Petitioner devices." PO Resp. 44–45. These general allegations are not sufficient to infer that Petitioner changed its design to incorporate the patented features based on its access to Patent Owner's technology. *See Liqwd*, 941 F.3d at 1138 (noting the "primary concern . . . to avoid treating mere infringement as copying simply because the claims of a patent arguably read on a competitor product").

Thus, we find this evidence is entitled to little weight in our obviousness analysis.

2. Commercial Success

Patent Owner suggests that evidence of commercial success further supports that the challenged claims are not obvious. PO Resp. 45–46. Specifically, according to Patent Owner, the claimed features were commercially successful because "Petitioner touted the claimed features of the invention in connection with products using the iBeacon technology covered by the '868 Patent," wherein the "privilege-based architecture" touted by Petitioner is "a key factor of the '868 Patent claims." *Id.* at 45. Patent Owner contends that Petitioner's commercial success is "directly attributable" to the combination of features and the benefits of the iBeacon technology covered by the challenged claims of the '868 Patent. *Id.* at 46.

We find Patent Owner's evidence unconvincing. In particular, the alleged touting relates to the products' functionality, not their commercial

success. *See* PO Resp. 45–46. We find no evidence in the record that the subject matter recited by the challenged claims of the '868 patent, itself, was the object of commercial success. *Id.* In fact, as Patent Owner points out, the alleged touting refers only broadly to "privilege base architecture." *Id.*

We agree with Petitioner that Patent Owner "only provides a conclusory statement that the commercial success is directly attributable to the combination of features." Pet. Reply. 18. That is, Patent Owner has not provided any evidence of commercial success, such as "economic data or sales figures directed to commercial success." *Id.* (citing *Chemours Company FC, LLC v. Daikin Industries, Ltd.*, 4 F.4th 1370, 1378 (Fed. Circ. 2021)).

Thus, we find this evidence is entitled to little weight in our obviousness analysis.

3. Licensing

Patent Owner suggests that evidence that competitors or customers have licensed a patent may provide probative and cogent evidence that claims at issue are not obvious. PO Resp. 46–47 (citing *Institut Pasteur & Universite Pierre Et Marie Curie v. Focarino*, 738 F.3d 1337, 1347 (Fed. Cir. 2013)). Patent Owner asserts that several "well-known" companies "have entered into licensing agreement pertaining to the patented technology covered by the '868 patent." *Id.* at 46.

We have considered Patent Owner's provided licenses as evidence concerning objective indicia of non-obviousness. *See* Exs. 2013, 2014. Although Patent Owner relies on these licenses as evidence, Patent Owner does not demonstrate a sufficient nexus between the challenged claims and the evidence offered. *See* PO Resp. 46–47; PO Sur-Reply 23–24. In

particular, Patent Owner contends that "the privilege-based architecture, which is a key feature of the '868 Patent claims, is touted as an advantage of Petitioner's products" (PO Resp. 48), but Patent Owner does not establish whether these licenses resulted directly from the unique characteristics of the claimed subject matter of the '868 patent.

As Petitioner notes, the asserted licenses address some 30+ patents, only one of which is the '868 patent. Pet. Reply 19. Patent Owner "failed to provide any evidence regarding the weight or importance of the '868 Patent to these agreements," and thus "failed to show a nexus between the claimed invention and the license agreements." *Id.*; *see also Teva Pharm. Int'l GMBH v. Eli Lily & Co.*, 8 F.4th 1349, 1363–64 (Fed. Cir. 2021) ("Here, given that 188 patents were licensed, the nexus between the license and the validity of any particular claim is rather tenuous to say the least. Thus, the Board was correct to require that Teva show something more than the mere existence of the license.").

The Federal Circuit has long recognized that licensing programs "are not infallible guides to patentability," and that they "sometimes succeed because they are mutually beneficial to the licensed group or because of business judgments that it is cheaper to take licenses than to defend infringement suits," or "for other reasons unrelated to the unobviousness of the licensed subject matter." *EWP Corp. v. Reliance Universal Inc.*, 755 F.2d 898, 907–08 (Fed. Cir. 1985). The Federal Circuit continues to "specifically require affirmative evidence of nexus where the evidence of commercial success presented is a license.'" *Iron Grip Barbell Co. v. USA Sports, Inc.*, 392 F.3d 1317, 1324 (Fed. Cir. 2004); *see also ABT Systems, LLC v. Emerson Elec. Co.*, 797 F.3d 1350, 1361–62 (Fed. Cir. 2015)

("While licenses can sometimes tilt in favor of validity in close cases, they cannot by themselves overcome a convincing case of invalidity without showing a clear nexus to the claimed invention.").

In this case, Patent Owner merely contends that "privilege-based architecture" is touted as an advantage of Petitioner's products, and relies merely on the existence of the licenses to show a nexus. We do not find such evidence to be sufficient. We are left to speculate as to whether the license agreements were entered "for other reasons unrelated to the unobviousness of the licensed subject matter." *See EWP*, 755 F.2d at 907–08. The mere existence of the licenses themselves cannot overcome a convincing case of obviousness without showing a clear nexus to the claimed invention. *See ABT*, 797 F.3d at 1361–62.

Thus, we find that Patent Owner has failed to show a sufficient nexus between the challenged claims of the '868 patent and the license agreements.

4. Conclusion as to Obviousness

In sum, we have reviewed Patent Owner's arguments and evidence regarding objective evidence of non-obviousness and, for the reasons outlined above, do not find them persuasive enough to outweigh Petitioner's evidence that claims 1, 2, 5, 20, 24, 25, 28, and 43 would have been obvious under 35 U.S.C. § 103.

III. CONCLUSION[3]

For the foregoing reasons, we determine on the record at hand that Petitioner has demonstrated by a preponderance of the evidence that the challenged claims of the '868 patent are unpatentable.

[3] Should Patent Owner wish to pursue amendment of the challenged claims in a reissue or reexamination proceeding subsequent to the issuance of this

In summary:

Claims	35 U.S.C. §	Reference(s)/Basis	Claims Shown Unpatentable	Claims Not Shown Unpatentable
1, 2, 5, 20, 24, 25, 28, 43	103	Haberman[4]		
1, 2, 5, 20, 24, 25, 28, 43	103	Haberman, Boger	1, 2, 5, 20, 24, 25, 28, 43	
1, 2, 5, 20, 24, 25, 28, 43	103	Haberman, Evans[5]		
1, 2, 5, 20, 24, 25, 28, 43	103	Haberman, Boger, Evans[6]		
Overall Outcome			1, 2, 5, 20, 24, 25, 28, 43	

IV. ORDER

For the reasons given, it is

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decision, we draw Patent Owner's attention to the April 2019 *Notice Regarding Options for Amendments by Patent Owner Through Reissue or Reexamination During a Pending AIA Trial Proceeding*. *See* 84 Fed. Reg. 16,654 (Apr. 22, 2019). If Patent Owner chooses to file a reissue application or a request for reexamination of the challenged patent, we remind Patent Owner of its continuing obligation to notify the Board of any such related matters in updated mandatory notices. *See* 37 C.F.R. § 42.8(a)(3), (b)(2).

[4] We do not reach this ground because we have determined the challenged claims to be unpatentable under another ground. *See supra* § II(E).

[5] We do not reach this ground because we have determined the challenged claims to be unpatentable under another ground. See supra § II(F).

[6] We do not reach this ground because we have determined the challenged claims to be unpatentable under another ground. *See supra* § II(F).

ORDERED that, based on the preponderance of the evidence, claims 1, 2, 5, 20, 24, 25, 28, and 43 of the '868 patent have been shown to be unpatentable; and

FURTHER ORDERED that, because this is a final written decision, parties to this proceeding seeking judicial review of our decision must comply with the notice and service requirements of 37 C.F.R. § 90.2.

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