

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

TARGET CORPORATION,
Petitioner,

v.

PROXICOMM WIRELESS, LLC,
Patent Owner.

IPR2020-00903
Patent 9,038,129 B2

Before BRIAN J. McNAMARA, CHARLES J. BOUDREAU, and
SEAN P. O'HANLON, *Administrative Patent Judges*.

McNAMARA, *Administrative Patent Judge*.

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

I. BACKGROUND

On November 10, 2020, we instituted an *inter partes* review of claims 1–5, 7, 10, 11, 16–20, 25, and 26 (“the challenged claims”) of U.S. Patent No. 9,038,129 B2 (“the ’129 patent”). Paper 11 (“Dec. to Inst.”). Patent Owner filed a Patent Owner Response (Paper 19, “PO Resp.”), Petitioner filed a Petitioner Reply (Paper 21, “Pet. Reply”) and Patent Owner filed a Patent Owner Sur-reply (Paper 22, “PO Sur-reply”). A transcript of an oral hearing held on August 18, 2021 (Paper 28, “Hr’g Tr.”) has been entered into the record.

We have jurisdiction under 35 U.S.C. § 6. This Final Written Decision is issued pursuant to 35 U.S.C. §318(a). We base our decision on the preponderance of the evidence. 35 U.S.C. § 316(e); 37 C.F.R. § 42.1(d).

Having reviewed the arguments of the parties and the supporting evidence, we conclude that Petitioner has demonstrated by a preponderance of the evidence that all the challenged claims are unpatentable.

II. THE ’129 PATENT

The ’129 patent is “generally concerned with facilitating the exchange of information and transactions between two entities associated with two wireless devices when the devices are in close proximity to each other.” Ex. 1001, 2:53–56. According to the ’129 patent, disadvantages of direct communication between short range devices using WiFi or Bluetooth techniques include the risk that two such devices will lose their ability to communicate when they no longer are in close proximity and the risk of fraud or exposure of locally stored sensitive information to unauthorized spoofing devices. *See id.* at 2:36–49. The ’129 patent addresses these and other issues with a system “utilizing both a short range and a long range wireless capability.” *Id.* at 2:56–57.

Figure 1 of the '129 patent is reproduced below.

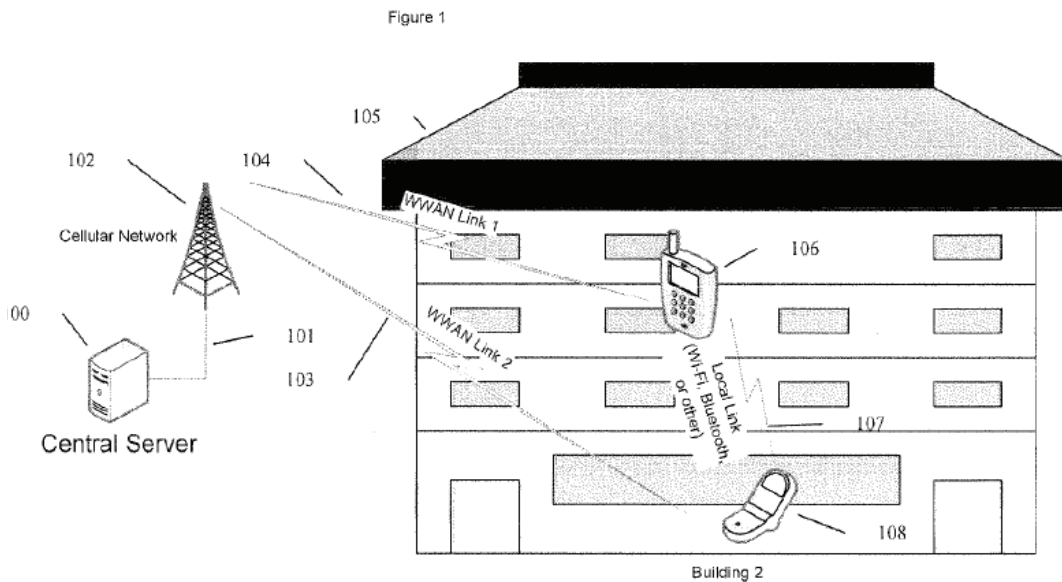


Figure 1 of the '129 Patent

Figure 1 of the '129 patent is a “block diagram of two mobile devices utilizing a preferred embodiment.” Ex. 1001, 5:4–5. A device, e.g., device 106, communicates over short range wireless link 107 (such as a Bluetooth IEEE802.15.1 link or a WiFi IEEE802.11 link) to detect the presence of other devices, e.g., device 108. *Id.* at 6:33–36. Device 106 uses wide area wireless network connections 103, 104 (such as IS-2000, WCDMA, GPRS, EDGE, LTE, Wi-Max (IEEE802.16)) to communicate to central server 100 and perform actual substantive communications with device 108. *Id.* at 6:36–41. Device 108 uses short range wireless link 107 and wide area wireless link 103 in a similar manner to communicate with device 106. *Id.* at 6:41–44. Wireless link 107 is used only for the detection process or to advertise a device’s presence to pass a “wireless identifier” (or “identifier”) between devices 106 and 108 during the proximity detection process. *Id.* at 6:45–49. Facilitating communication between the devices using identifiers

and standard Wireless Wide Area Network (WWAN) or 3G communications requires less resources than peer to peer communications and allows the devices to continue to communicate when no longer in close proximity. *Id.* at 6:58–7:9. This approach also allows a central server to control content based on the identity of the device.

Figure 2 of the '129 patent is shown below.

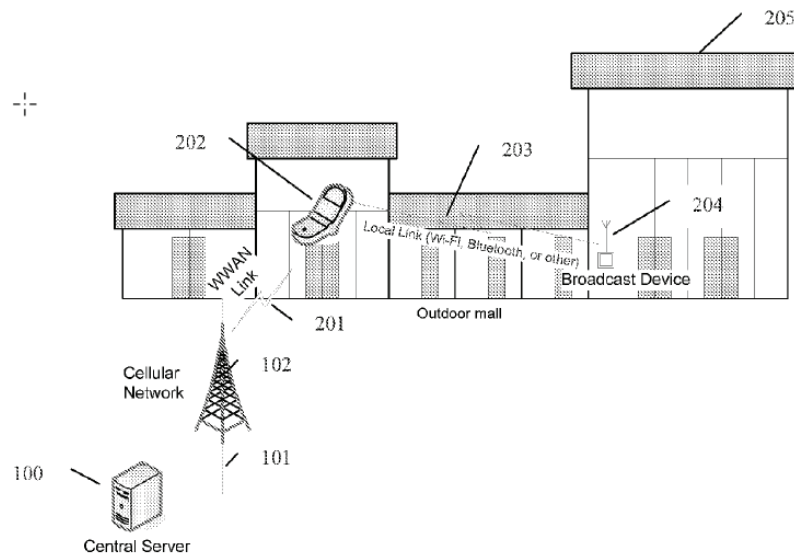


Figure 2 of the '129 Patent

Figure 2 is a “block diagram of a fixed broadcast device and a mobile device.” Ex. 1001, 5:6–7. In an example where the process is used in a museum, an exhibit associated device 204 that does not have a WWAN connection, advertises its presence to facilitate the receipt of local information by broadcasting a local identifier. *Id.* at 7:30–33. A museum patron’s device 202 detects device 204’s identifier, and passes the identifier to central server 100. *Id.* at 7:37–38. Central server 100 recognizes the identifier as being associated with that exhibit and passes relevant information content (pictures, text, web pages, games, coupon offers, etc.) to

the patron's device 202, even after the patron has left the proximity of exhibit associated device 204. *Id.* at 7:38–49; *see id.* at 8:41–52.

The '129 patent also states that, in a similar way, broadcast device 204 may be associated with an account of an individual or entity that contains personal information and information regarding allowed communication. Ex. 1001, 8:36–40. “[P]olicy based permission associated with each account and applied to information associated with that account” “can be used to determine what information and under [what] circumstances information may be disclosed to another device or user associated with another account.” *Id.* at 8:53–58.

Figure 9 of the '129 patent is shown below.

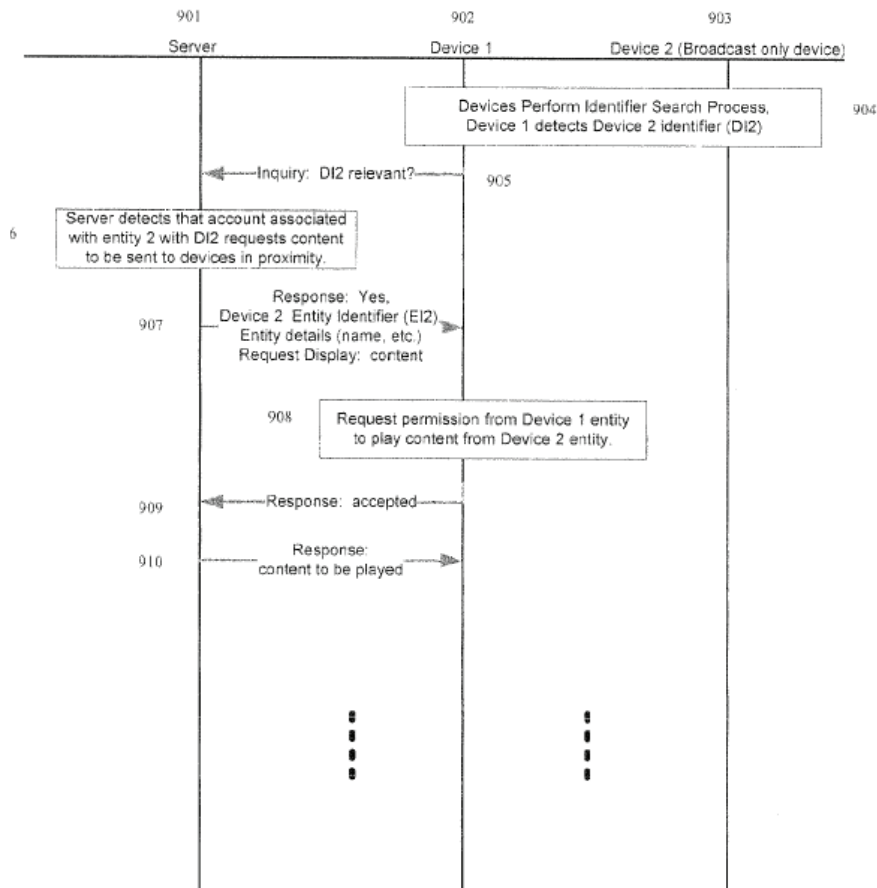


Figure 9 of the '129 patent

Figure 9 concerns a grocery store example in which customer device 902 (Device 1) scans for identifiers (step 904) and detects identifier DI2 transmitted from device 903 (broadcast only Device 2). Ex. 1001, 14:45–49. At Step 905 customer device 902 (Device 1) sends a message to server 901 inquiring if device identifier DI2 is relevant to the entity (customer) associated with the customer device (Device 1) and if information associated with device identifier DI2 is available for return. *Id.* at 14:49–52; Fig. 9. At step 906 server 901 retrieves the accounts of entity EI2 associated with identifier DI2 of broadcast only device 903 and customer device 902 (Device 1). *Id.* at 14:52–53. Server 901 detects that there is a coupon and other multimedia content, e.g., a recipe video, available for download to customer device 1 and that the settings in the customer account (EI1) allow for the notification of broadcast devices in proximity. *Id.* at 14:53–60. Server 901 transmits response message 907 to device 902 (customer device 1), indicating the presence of the detected device 903 (broadcast Device 2) and requesting permission to send the content available to customer device 1. *Id.* at 14:61–63. Customer device 902 requests input from the entity associated with server 901 for permission to download the coupon and other available content. *Id.* at 14:63–66. Message 909 from customer Device 1 accepting the content is sent to server 901, and response message 910 begins content delivery from the server to customer device 1. *Id.* at 14:66–15:3.

III. ILLUSTRATIVE CLAIM

Claim 1, reproduced below with paragraph designations used in the Petition, is illustrative of the subject matter of the '129 patent.

[1pre]. A method for facilitating an exchange of information between first and second wireless devices or entities, the method utilizing a server performing the steps of:

- [1.a] receiving a first unique identifier communicated over a wide area link from the first wireless device,
- [1.b] receiving a second unique identifier associated with the second wireless device, the second unique identifier associated with the second wireless device being communicated to the first wireless device over a local wireless link, and then from the first wireless device to the server over the wide area link,
- [1.c] comparing a disclosure policy associated with the second unique identifier with the first unique identifier from the first wireless device or with an identifier or other data derived from the first unique identifier, wherein the disclosure policy specifies data representing one or more rules for privacy of information concerning the second wireless device or privacy of information concerning an entity associated with the second wireless device; and
- [1.d] communicating further information to the first wireless device as permitted by a result of comparing the disclosure policy, and wherein said further information is based, at least in part, upon a stored state resulting from previous interactions utilizing said server between the entities associated with the first and second unique identifiers, and
- [1.e] wherein said further information additionally comprises content relating to one or more of the following:
 - a current step of a multiple step electronic commerce transaction, wherein said current step is related to said stored state and related to feedback ratings by other entities related to an entity associated with the second wireless device,
 - a reward for participation in a loyalty program, wherein said reward is dependent upon said stored state and related to past purchasing behavior of an entity associated with the first wireless device, or
 - social network content wherein said social network content is dependent upon said stored state, wherein said stored state comprises a friends list associated with the entity associated with the second wireless device,

and wherein said disclosure policy utilized in said step of comparing comprises the inclusion of an entity associated with the first wireless device being included in said friends list and resulting in access to the otherwise private social network content of the entity associated with the second wireless device.

IV. GROUNDS OF INSTITUTION

Inter partes review was instituted on the following grounds:

Claim(s) Challenged	35 U.S.C. §	Basis
1–5, 7, 10, 11, 16–20, 25, 26	102 ¹	Eagle ²
1–5, 7, 10, 11, 16–20, 25, 26	103	Eagle

V. CLAIM CONSTRUCTION

Claim terms “are generally given their ordinary and customary meaning” as understood by a person of ordinary skill in the art in question at the time of the invention. *Phillips v. AWH Corp.*, 415 F.3d 1303, 1312–13 (Fed. Cir. 2005) (citations omitted) (en banc). “In determining the meaning of the disputed claim limitation, we look principally to the intrinsic evidence of record, examining the claim language itself, the written description, and the prosecution history, if in evidence.” *DePuy Spine, Inc. v. Medtronic Sofamor Danek, Inc.*, 469 F.3d 1005, 1014 (Fed. Cir. 2006) (citing *Phillips*, 415 F.3d at 1312–17). Any special definition for a claim term must be set

¹ The Leahy-Smith America Invents Act (“AIA”), Pub. L. No. 112-29, 125 Stat. 284, 285–88 (2011), amended 35 U.S.C. §§ 102 and 103, effective March 16, 2013. Given that the application from which the ’736 patent issued was filed before this date, the pre-AIA versions of §§ 102 and 103 apply.

² U.S. Patent App. Publ. No. US2005/0250552 A1, published Nov. 10, 2005 (Ex. 1004).

forth in the specification with “reasonable clarity, deliberateness, and precision.” *In re Paulsen*, 30 F.3d 1475, 1480 (Fed. Cir. 1994).

In the Decision to Institute we declined to adopt Patent Owner’s proposal that we construe claim limitation 1.d, i.e., “a stored state resulting from previous interactions [utilizing said server] between the entities associated with the first and second unique identifiers,” to mean “a stored state resulting from previous interactions [utilizing said server] specifically between the entities associated with . . . first and second unique identifiers.” Dec. to Inst. 10–12. We declined to import the word “specifically” into the claim as a matter of claim construction because it does not change the meaning of the claim. *Id.* at 12. Moreover, importing this new term into the claim improperly suggests an additional, undefined limitation that is not present in the claims at issue. For example, in the Decision to Institute, we noted that the ’129 patent explicitly distinguishes between a device and an entity, which could be a person or a business, and includes an example in which one entity, a museum, is associated with multiple device identifiers. *Id.*

Petitioner and Patent Owner agree this claim language should be given its plain and ordinary meaning. *See* Pet. 14; Pet. Reply 1–4; PO Resp. 14 (as to claim limitations 1.d and 16.c, arguing “this ‘stored state’ term should be given understood based on its plain and ordinary meaning”); PO Sur-reply 1–4. Patent Owner also acknowledges that “(1) an ‘entity’ can include a legal entity, and (2) the ’129 Patent contemplates a single entity may be associated with multiple identifiers through an account,” but contends “neither changes the meaning or scope of the claimed ‘stored state,’ and neither changes whether Eagle would anticipate or render obvious the challenged claims.” PO Sur-reply 4.

Although Patent Owner argues, we should insert the word “specifically” into this limitation (PO Resp. 22), that does not change the meaning of the claim. An element of Patent Owner’s claim construction argument is its assertion “the way that Petitioner mapped Eagle to the claims does not satisfy this [claim] language under its plain meaning.” PO Sur-reply 2–4. We address that contention separate and apart from the issue of claim construction.

The language of claim limitation 1.d is not limited to the devices interacting with each other, but to previous interactions between the entities associated with the devices. To the extent Patent Owner’s claim construction arguments address the meaning of the claim language, Patent Owner’s arguments appear aimed at limiting the claim to a “stored state” derived from previous interactions between the entities where those interactions occurred using only those devices having the first unique ID and the second unique ID. PO Resp. 19–20. That is not the language of the claims—the claims recite only “a stored state resulting from previous interactions utilizing said server between the *entities associated with* the first and second unique identifiers” (emphasis added).

In construing claim limitations 1.d and 16.c, we focus on the language in the claim and apply the plain and ordinary meaning. Patent Owner asserts that during prosecution of the ’129 patent, the applicant asserted that “the claimed ‘stored state’ must result from ‘previous interactions *specifically between the two entities (or devices) associated with the first and second unique identifiers.*’” PO Resp. 22 (citing Ex. 1002, 209). In this context, applicant sought to distinguish a reference by arguing that, for example, declining a credit card for overdrawing its limit was not a previous action between the entities associated with the first and second unique IDs. Ex.

1002, 209–210. As the applicant did not incorporate the terms “specifically” and “or devices” into the claim, we understand Applicant’s argument to indicate devices are an alternative to entities and not a further limitation on the term “entities.”

In sum, applying the plain and ordinary meaning, the “stored state” language of claim limitation 1.d recites that the interactions (i) must have occurred previously, (ii) must have used the server and (iii) must have been between entities associated with the unique IDs of the first and second devices. The language of limitation 1.d does not recite (i) that there is any specific relationship between the entities associated with the first and second unique IDs, (ii) that the entities associated with the first and second unique IDs must be different, (iii) that the previous interactions between the entities associated with the first and second devices must have occurred using the first and second devices themselves (i.e., an entity can be associated with multiple devices), and (iv) that the interactions utilizing the server occurred at any particular time, except to the extent that the interactions occurred “previously.”

VI. ANALYSIS OF PRIOR ART CHALLENGES

A. Introduction

“In an [*inter partes* review], the petitioner has the burden from the onset to show with particularity why the patent it challenges is unpatentable.” *Harmonic Inc. v. Avid Tech., Inc.*, 815 F.3d 1356, 1363 (Fed. Cir. 2016) (citing 35 U.S.C. § 312(a)(3) (requiring *inter partes* review petitions to identify “with particularity . . . the evidence that supports the grounds for the challenge to each claim”)). This burden of persuasion never shifts to Patent Owner. *See Dynamic Drinkware, LLC v. Nat’l Graphics, Inc.*, 800 F.3d 1375, 1378 (Fed. Cir. 2015) (discussing the burden of proof in

inter partes review). 35 U.S.C. §316(e) provides that Petitioner has the burden to demonstrate unpatentability by a preponderance of the evidence.

I. Anticipation

Anticipation is a question of fact, as is the question of what a prior art reference teaches. *In re NTP, Inc.*, 654 F.3d 1279, 1297 (Fed. Cir. 2011). “A claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference.” *Verdegaal Bros. Inc., v. Union Oil Co.*, 814 F.2d 628, 631 (Fed. Cir. 1987); *see also Finisar Corp. v. DirecTV Group, Inc.*, 523 F.3d 1323, 1334 (Fed. Cir. 2008) (to anticipate a patent claim under 35 U.S.C. § 102, “a single prior art reference must expressly or inherently disclose each claim limitation”). Moreover, “[b]ecause the hallmark of anticipation is prior invention, the prior art reference—in order to anticipate under 35 U.S.C. § 102—must not only disclose all elements of the claim within the four corners of the document, but must also disclose those elements ‘arranged as in the claim.’” *Net MoneyIN, Inc. v. VeriSign, Inc.*, 545 F.3d 1359, 1369 (Fed. Cir. 2008) (quoting *Connell v. Sears, Roebuck & Co.*, 722 F.2d 1542, 1548 (Fed. Cir. 1983)).

Whether a reference anticipates is assessed from the perspective of an ordinarily skilled artisan. *See Dayco Prods., Inc. v. Total Containment, Inc.*, 329 F.3d 1358, 1368 (Fed. Cir. 2003) (“[T]he dispositive question regarding anticipation [i]s whether one skilled in the art would reasonably understand or infer from the [prior art reference’s] teaching’ that every claim element was disclosed in that single reference.” (quoting *In re Baxter Travenol Labs.*, 952 F.2d 388, 390 (Fed. Cir. 1991))) (emphasis omitted).

Additionally, “[u]nder the principles of inherency, if the prior art necessarily functions in accordance with, or includes, the claimed

limitations, it anticipates.” *MEHL/Biophile Int’l Corp. v. Milgraum*, 192 F.3d 1362, 1365 (Fed. Cir. 1999) (citation omitted); *In re Cruciferous Sprout Litig.*, 301 F.3d 1343, 1349–50 (Fed. Cir. 2002).

2. *Obviousness*

As set forth in 35 U.S.C. § 103(a),

[a] patent may not be obtained . . . if the differences between the subject matter sought to be patented 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.

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) when in evidence, objective evidence of nonobviousness. *Graham v. John Deere Co.*, 383 U.S. 1, 17–18 (1966).

Additionally, the obviousness inquiry typically requires an analysis of “whether there was an apparent reason to combine the known elements in the fashion claimed by the patent at issue.” *KSR Int’l Co. v. Teleflex Inc.*, 550 U.S. 398, 418 (2007) (citing *In re Kahn*, 441 F.3d 977, 988 (Fed. Cir. 2006) (requiring “articulated reasoning with some rational underpinning to support the legal conclusion of obviousness”)); see *In re Warsaw Orthopedic, Inc.*, 832 F.3d 1327, 1333 (Fed. Cir. 2016) (citing *DyStar Textilfarben GmbH & Co. Deutschland KG v. C. H. Patrick Co.*, 464 F.3d 1356, 1360 (Fed. Cir. 2006)).

An obviousness analysis “need not seek out precise teachings directed to the specific subject matter of the challenged claim, for a court can take account of the inferences and creative steps that a person of ordinary skill in the art would employ.” *KSR*, 550 U.S. at 418; accord *In re Translogic*

Tech., Inc., 504 F.3d 1249, 1259 (Fed. Cir. 2007). Petitioner cannot satisfy its burden of proving obviousness by employing “mere conclusory statements.” *In re Magnum Oil Tools Int’l, Ltd.*, 829 F.3d 1364, 1380 (Fed. Cir. 2016). Instead, Petitioner must articulate a reason why a person of ordinary skill in the art would have combined the prior art references. *In re NuVasive*, 842 F.3d 1376, 1382 (Fed. Cir. 2016).

A reason to combine or modify the prior art may be found explicitly or implicitly “include market forces; design incentives; the ‘interrelated teachings of multiple patents’; ‘any need or problem known in the field of endeavor at the time of invention and addressed by the patent’; and the background knowledge, creativity, and common sense of the person of ordinary skill.” *Perfect Web Techs., Inc. v. InfoUSA, Inc.*, 587 F.3d 1324, 1328–29 (Fed. Cir. 2009) (quoting *KSR*, 550 U.S. at 418–21).

Before determining whether a claim would have been obvious in light of the prior art, we consider any relevant evidence of secondary considerations of non-obviousness. *See Graham*, 383 U.S. at 17. Notwithstanding what the teachings of the prior art would have suggested to one of ordinary skill in the art at the time of the invention, the totality of the evidence submitted, including objective evidence of non-obviousness, may lead to a conclusion that the challenged claims would not have been obvious to one of ordinary skill. *In re Piasecki*, 745 F.2d 1468, 1471–72 (Fed. Cir. 1984). No evidence of secondary considerations of non-obviousness has been presented in this proceeding.

We analyze the asserted grounds of unpatentability in accordance with these principles to determine whether Petitioner has met its burden to establish unpatentability by a preponderance of the evidence.

B. Claims 1–5, 7, 10, 11, 16–20, 25, and 26 as Anticipated By or Obvious Over Eagle

As Petitioner challenges claims 1–5, 7, 10, 11, 16–20, 25, and 26 as anticipated by or obvious over the same reference (Eagle), we address these grounds together.

1. Eagle

Eagle discloses communication devices that identify nearby like devices and send a notification to a remote server. Ex. 1004, code (57). “When a notification message is received at the server identifying two devices that have come within range of one another, the server compares the profile data associated with each of the two identified devices and facilitates communications between the devices when appropriate.” *Id.* Eagle “uses personal area wireless network devices[,] such as Bluetooth transceivers to identify social proximity and a large area wireless network[,] such as a cellular phone network [or] the Internet, to permit interest matching functions to be performed at a remote central server and to instigate person-to-person interactions between selected devices . . . near each other.” *Id.* ¶ 10.

“Each cellular phone keeps a log of other devices that have been previously detected and, whenever a new device comes within range, a notification message is transmitted to a remote server via the long-range cellular phone network.” Ex. 1004 ¶ 4. The notification message contains identification information for the requesting device and the nearby device whose presence has been detected and, preferably, a value indicating the user’s willingness to receive alert messages from the server when new devices come within range. *Id.* When a server receives a notification message identifying two devices in range of each other, the server fetches

profile data associated with each of the identified devices and calculates a value indicating the extent to which the two profiles match. *Id.* ¶ 5. Users associate weighting values with information about themselves and use these weighting values to specify information's importance to be assigned to different data when calculating a similarity metric or score by extracting commonalities between two user's profiles and summing the user defined weighting values. *Id.* ¶ 12. If the calculated value exceeds a threshold associated with a device, the server sends to each device an alert message containing information that describes the nearby device to the extent the owner has consented to the information (e.g., name address, contact information, photograph, interests) being revealed. *Id.* ¶¶ 6–7. A device user can supply profile information indicating the extent to which the profile of the detected nearby devices must match the requestor's interests before an alert message is sent. *Id.*

Figure 2 of Eagle is reproduced below:

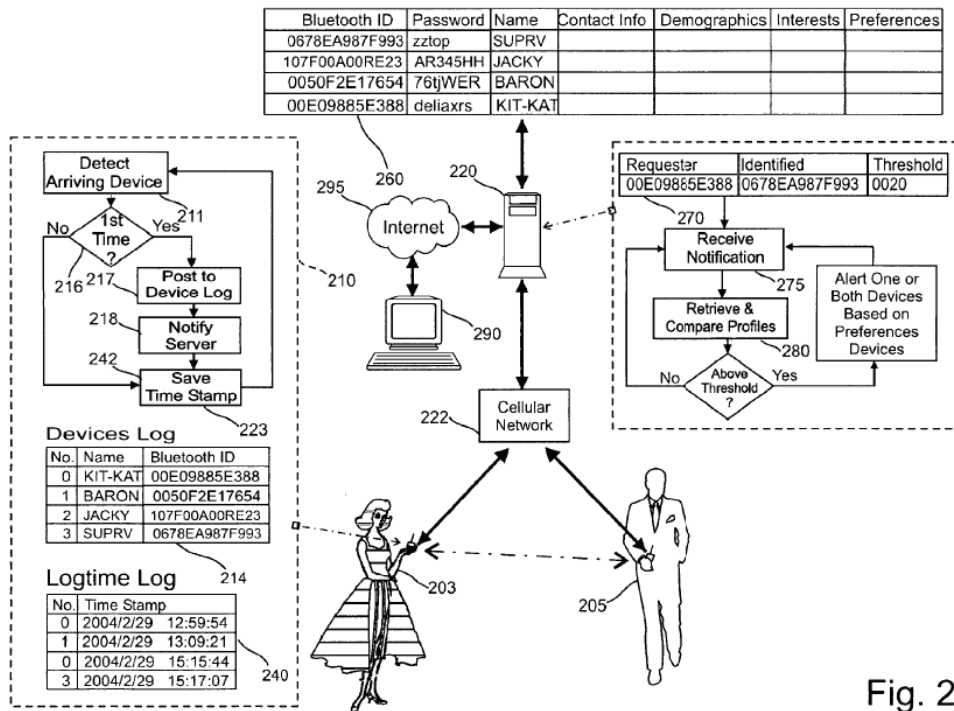


Fig. 2

Figure 2 is a block diagram illustrating the principal components of Eagle's system. Ex. 1004 ¶ 16. Figure 2 of Eagle shows BlueAware application program 210 ("BlueAware") installed to execute on each cellular phone, e.g., a device operated by first user 203, allowing user 203's device to register itself and create a profile data template that can be populated by the device owner using the cellular phone or PC 290 connected to server via Internet 295. *Id.* ¶¶ 22, 29. The BlueAware application maintains on each device a Devices Log 214 and a Logtime Log 240. *Id.* ¶¶ 22, 23, Fig. 2. When a nearby second device, e.g., user 205's device, is detected (step 211) by user 203's device, the BlueAware application in user 203's device compares the Bluetooth ID of the nearby user 205's device with the content of Devices Log 214 in user 203's device. *Id.* ¶ 22. If the Bluetooth ID of nearby user 205's device has not been previously detected by user 203's device, the Bluetooth ID of user 205's device is posted in Devices Log 214 and Logtime Log 240 of first user 203's device, and user 203's device sends a request message to remote server 220 via cellular network 222. *Id.* ¶ 23. If the detected second device of user 205 is already recorded in Devices Log 214 of user 203's device, an entry is made in Logtime Log 240. *Id.* The BlueAware application uses the timestamp data in Logtime Log 240 of each device to determine whether to transmit a notification message to the server. *Id.* ¶ 24. For example, in order to conserve memory, "the BlueAware application may periodically remove the identification and time stamp data for devices [that] have been out of range for an extended time" period, requiring transmission of a new notification upon detection of a device that has been removed from the log. *Id.*

A notification message from a Bluetooth device, e.g., from user 203's device, to server 220 may consist of the Bluetooth ID (BTID) of the

requesting device (user 203's device), the BTID of another device whose current proximity was detected (user 205's device), and a current threshold value indicating the willingness of the current requester (user 203) to receive alert messages from the server when new devices (e.g., user 205's device) come within range. *Id.* ¶¶ 4, 51. The two BTIDs are used by the server to retrieve profile data from database 260 and compare the profiles as indicated at step 280 to calculate a similarity score value indicating the degree to which the profiles match; if the similarity score exceeds the thresholds for one or both devices (step 290) the servers sends an alert message to the corresponding device (step 295). *Id.* The server calculates the similarity score by comparing the sum of weighted values the requestor has assigned to "interest" categories in the two profiles. *Id.* ¶¶ 52–53. Each user's profile data may include data specifying a set of device IDs of friends, friends of friends, or friends of friends of friends, allowing the user to request alert messages be sent from the server only when a new device corresponding to a "trusted" person having common interests at a specified level is nearby. *Id.* ¶¶ 4, 56, 66. Eagle also discloses that interaction behavior and proximity can be used to learn patterns, so that a user's profile also may be populated with inferred data, e.g., automatically created lists of friends and likely friends that can be used to create a trust network. *Id.* ¶ 67.

2. *Claim 1*

Petitioner contends that claim 1 is anticipated by Eagle under 35 U.S.C. § 102 or obvious over Eagle under 35 U.S.C. § 103.

a) *Claim 1 – Preamble*

Petitioner identifies the preamble of claim 1 as reciting: "A method for facilitating an exchange of information between first and second wireless devices or entities, the method utilizing a server performing the steps." Pet.

25. Petitioner cites Eagle’s requester device as the claimed first wireless device, Eagle’s identified device as the claimed second wireless device, and notes that these devices identify themselves by exchanging unique identification codes that are transmitted to a remote server. *Id.* at 25–26 (citing Ex. 1004, code (57), ¶¶ 3, 9–10, 48; Ex. 1003, Williams Decl. ¶¶ 105–107). Patent Owner does not respond explicitly to Petitioner’s contentions concerning the preamble of claim 1. Based on the evidence of record, we find that Petitioner has demonstrated Eagle discloses the recitations in the preamble of claim 1.³

b) Claim Limitation 1.a

Petitioner identifies as claim limitation 1.a the recitation “receiving a first unique identifier communicated over a wide area link from the first wireless device,” Pet. 26–27. Petitioner notes Eagle discloses that each time a requester device using, e.g., Bluetooth communication techniques, detects another device in its proximity, the requester compares the ID of the proximate device to a log of previously detected device IDs. *Id.* at 27 (citing Ex. 1004 ¶¶ 4, 10). If the requester device determines the proximate device is “new,” i.e., its device ID is not in the previously detected log, the requester transmits a notification message including the requester’s identifier and the identified device’s identifier to the server, e.g., over a long range cellular network. *Id.* at 27–28 (citing Ex. 1004 ¶¶ 3–4, 10, 20, 31, 48, Fig. 2; Ex. 1003, Williams Decl. ¶¶ 108–109). Patent Owner does not respond explicitly to Petitioner’s contentions concerning the claim limitation 1.a.

³ We need not decide whether the preamble is limiting because Petitioner has shown that Eagle discloses the recitation in the preamble. *See Allen Eng’g Corp. v. Bartell Indus., Inc.*, 299 F.3d 1336, 1346 (Fed. Cir. 2002) (“Generally, the preamble does not limit the claims.”)

Based on the evidence of record, we find that Petitioner has demonstrated Eagle discloses the recitations in claim limitation 1.a.

c) Claim Limitation 1.b

Petitioner identifies as claim limitation 1.b the recitation “receiving a second unique identifier associated with the second wireless device, the second unique identifier associated with the second wireless device being communicated to the first wireless device over a local wireless link, and then from the first wireless device to the server over the wide area link.” Pet. 28. Petitioner cites Eagle as disclosing that when a device is within range of another such device it identifies itself with a unique identification value, such as a Bluetooth address value, and the devices exchange such identification information over a short range wireless link (Bluetooth), so that each device receives the ID code for the other and includes the respective identified ID code in a notification message sent to the server over a long range cellular network. Pet. 28–30 (citing Ex. 1004 ¶¶ 3–4, 18, 20, 31, 48, 50, claims 2–3, Fig 2; Ex. 1003, Williams Decl. ¶¶ 110–113). Patent Owner does not respond explicitly to Petitioner’s contentions concerning the claim limitation 1.b. Based on the evidence of record, we find that Petitioner has demonstrated Eagle discloses the recitations in claim limitation 1.b.

d) Claim Limitation 1.c

Petitioner identifies as claim limitation 1.c the recitation “comparing a disclosure policy associated with the second unique identifier with the first unique identifier from the first wireless device or with an identifier or other data derived from the first unique identifier, wherein the disclosure policy specifies data representing one or more rules for privacy of information concerning the second wireless device or privacy of information concerning

an entity associated with the second wireless device.” Pet. 30–31. Petitioner cites Eagle as disclosing that upon receipt of a request message, the server fetches the profiles of the identified devices and compares them to determine the extent to which information in the profiles may be shared, and the profile information that identifies friends in a trust network. *Id.* at 30–33 (citing Ex. 1004 ¶¶ 4–5, 7, 12, 41, 50–51, 56–57, 66; Ex. 1003, Williams Decl. ¶¶ 114–118). Petitioner notes that the Requester ID is compared to the identified device’s trust network to determine whether the requester device can receive information about the identified device. *Id.* at 31 (citing Ex. 1004 ¶¶ 50, 66). Patent Owner does not respond explicitly to Petitioner’s contentions concerning the claim limitation 1.c. Based on the evidence of record, we find that Petitioner has demonstrated Eagle discloses the recitations in claim limitation 1.c.

e) Claim Limitation 1.d

Petitioner identifies as claim limitation 1.d the recitation “communicating further information to the first wireless device as permitted by a result of comparing the disclosure policy, and wherein said further information is based, at least in part, upon a stored state resulting from previous interactions utilizing said server between the entities associated with the first and second unique identifiers.” Pet. 33–34.

(1) Analysis if “stored state” is limited to require a one-to-one correspondence between devices and entities

Petitioner contends that Eagle teaches the server sending an “alert message” to one or both of two nearby devices only when a trusted person having common interests is nearby, as determined by a list of friends provided in previous interactions utilizing the server. Pet. 20–21, 33.

According to Petitioner, the list of likely friends in the profile is an example of the claimed “stored state.” *Id.* at 33 (stating “**further information is based, at least in part upon a stored state** (e.g., ‘lists of likely friends’)”); *see also id.* at 34 (citing Ex. 1004 ¶¶ 5, 66, 67). Petitioner also cites Eagle’s disclosure that by processing proximity data, a user’s profile may be further populated with inferred data, e.g., “one or more automatically created lists of likely friends . . . that can be used to create a trust network.” *Id.* at 33.

According to Petitioner, Eagle’s server compares profile data, which can include the inferred data, e.g., likely friends (the claimed stored state), generated from previous interactions between devices monitored by the server, so that the devices can determine whether to communicate an alert message. *Id.* at 34. Petitioner notes that Eagle does not send information if the recipient (the requester device) is not part of the identified device’s trust network, and that further information in alert messages is based on the stored state, i.e., the list of likely friends that results from previous interactions between entities associated with the first and second devices. *Id.* (citing Ex. 1004 ¶¶ 56, 66–67). According to Petitioner, even if it were argued that the stored state itself must be sent in the alert message, it would have been obvious to a person of ordinary skill to send Eagle’s friends list as part of the alert message—this is because Eagle discloses the alert message includes information that is useful in a specific application to identify or promote communications between nearby devices. *Id.* at 34–35 (citing Ex. 1004 ¶¶ 7, 67).

Patent Owner contends that Petitioner’s arguments fail because “Petitioner’s theories require both that the detected device (i.e., Petitioner’s alleged ‘second wireless device’) be ‘new’ (so that the message is sent to the server) but also that the detected device already have interacted with the

detecting device (i.e., Petitioner’s alleged ‘first wireless device’) (because of the ‘stored state’ requirement).” PO Resp. 28. According to Patent Owner, in Eagle there cannot be a stored state based on previous interactions between the entities associated with the first and second devices because “Eagle teaches that the identifiers will be sent to the server only where the devices’ identifiers do not appear on each others’ respective device logs,” i.e., “Eagle teaches facilitating interactions with a *newly detected device*, not a previously detected device.” *Id.* at 26–27 (emphasis by Patent Owner) (citing Ex. 2010, Declaration of Michael Foley (“Foley Decl.”) ¶ 49).

Patent Owner acknowledges that not all interactions in Eagle are based on newly detected devices, noting that Eagle discloses sending notifications to the server if the wireless device has periodically removed identification and timestamp data for devices that have been out of range for an extended time period. PO Resp. 45. Nevertheless, Patent Owner argues it is an “unlikely and undisclosed possibility that some users have interacted and that the devices were then out of range for such an extended period of time that the device logs no longer reflected the previous interactions.” *Id.* According to Patent Owner there is no stored state in Eagle even if in a corner case, “Eagle mistakenly (and contrary to the goals and teachings of Eagle) results in the server receiving a request related to devices whose users do already know each other.” *Id.* (citing Ex. 2010, Foley Decl. ¶¶ 68-69).

Patent Owner emphasizes that Eagle seeks to facilitate interactions between people via devices that are new to each other, but that the challenged claim requires that the “stored state result[s] from *previous interactions utilizing said server between the entities associated with the first and second unique identifiers.*” PO Resp. 29 (citing Ex. 2010, Foley Decl. ¶52). According to Patent Owner, “the purpose of Eagle is to notify

the server where the entities associated with the devices have *not* previously interacted,” i.e. to “allow strangers with similar interests to meet and communicate.” *Id.* at 30 (emphasis by Patent Owner) (citing Ex. 1004 ¶¶ 2, 64, 65). Patent Owner asserts that this purpose would be frustrated in the absence of a one-to-one correspondence between people and devices. *Id.*

Patent Owner’s argument is unavailing, even if we apply Patent Owner’s theory of a one-to-one correspondence between people and devices. Eagle discloses that the first time a wireless device encounters a nearby device within a specified range, the wireless device communicates to a server a notification or request message that includes the identification of the requesting device and the detected device, as well as the requesting device’s threshold value; this causes the server to the fetch and compare the profiles of the devices and generate an alert message to the requester when appropriate. Ex. 1004 ¶¶ 4–6, 22–24. Eagle discloses that a user can specify that the server send alert messages only to “trusted” persons as determined by profile data that includes a list of friends, and a trust network populated by inferred data, such as an automatically created list of likely friends or mutual friends. Ex. 1004 ¶¶ 23, 56, 66–67. Eagle also discloses that a wireless device periodically removes the timestamp and identification data of another device after an extended period of non-contact, but sends another message to the server upon a subsequent encounter with that other device. Ex. 1004 ¶¶ 23–24. On the subsequent encounter, the server responds with an alert message based on the information stored after the first encounter between the devices, i.e., a stored state, including friends list and lists of likely friends inferred after the first encounter by tracking proximity data. *See Hr’g Tr.* 10:6–12:23, 14:9–16. As Petitioner points out, “even if it was assumed that Eagle was restricted to a one-to-one relationship between

entities and devices, Eagle’s inferred ‘list[] of likely friends’ would still be a ‘stored state resulting from previous interactions [] between the entities associated with the first and second unique identifiers’—i.e., the inferred data may be based on previous interactions between the exact same users with the exact same devices having coming back into proximity after an extended period of time.” Reply 13 (citing Pet. 33–36, Ex. 1004 ¶ 67; Ex. 1003, Williams Decl. ¶¶ 119–125; Ex. 2013, Williams Tr. 58:13–24).

We are not persuaded by Patent Owner’s characterization of Eagle as “mistakenly” receiving a request related to devices whose users already know each other. Hr’g Tr. 41:2–44:18. Patent Owner’s related argument that “[w]hat’s sent down to me as an alert [is] not related [to] whether I’ve interacted with that person before” (Hr’g Tr. 44:10–18) is also unavailing. In contrast to Patent Owner’s contentions, Eagle explicitly teaches deleting logs from the wireless device as a means of preserving memory in the wireless device, but Eagle does not disclose deleting information stored in the server resulting from prior interactions using the server between the devices. Thus, subsequent communications between the same devices are based upon a stored state resulting from previous interactions utilizing the server. For this reason, we find that Petitioner has demonstrated that Eagle discloses claim limitation 1.d, even if we apply Patent Owner’s more restrictive construction of “stored state” to require a one-to-one correspondence between the entities and the first and second devices.

(2) Analysis if “stored state” is not limited to a one-to-one correspondence between devices and entities

We reach the same conclusion applying a construction of “stored state” that does not require a one-to-one correspondence between entities

and devices. In our discussion of the construction of “stored state,” we recognized that an entity, such as a business, can have many associated devices (and users of those devices) and concluded that the claims of the ’129 patent do not recite a one-to-one correspondence between entities and devices. *See* Section V. Recognizing that Patent Owner’s proposed requirement is not articulated in the claim language, we declined to adopt Patent Owner’s construction to the extent it attempts to read into claim limitation 1.d a further requirement that the previous interactions that take place utilize the server and be between the devices having the first and second unique ID. *See* Section V.

Both Petitioner and Patent Owner argue that Eagle concerns interactions with people or entities, rather than devices. According to Patent Owner, “Eagle is drawn to facilitating interactions and communications with ‘new’ people and forging new connections” and “the challenged claims . . . contemplate that the users (via their devices) have previously interacted utilizing the server, resulting in the claimed ‘stored state.’” PO Resp. 24 (citing Ex. 2010, Foley Decl. ¶¶ 38–41). In disputing Patent Owner’s contention that Eagle requires a one-to-one relationship between entities and devices (*see* Pet. Reply 6–9), Petitioner argues that in Eagle “it is interactions between people (*i.e.*, the entities using the devices), not devices, that is being used to generate inferred data and populate user profiles” and that “Eagle explicitly contemplates that people may use multiple devices to interact with the network” (*id.* at 8 (citing Ex. 1004 ¶¶ 29, 67–68; Pet. 33–36, 39–40; Ex. 1038, Transcript of Deposition of Michael Foley (“Foley Tr.”) 28:8–22)).

Patent Owner acknowledges that “there is no question that ‘an entity’ may be a legal entity” and “the ’129 patent contemplates that a single entity

may be associated with multiple identifiers.” PO Sur-reply 3–4.

Nevertheless, Patent Owner insists on a one-to-one correspondence between entities and devices because “the ‘stored state’ must ‘result[] from previous interactions [utilizing said server] between the entities associated with the first and second unique identifiers’ not entities associated with those entities.” *Id.* at 4 (alterations in original) (citing PO Resp. 19–20).

According to Patent Owner, “Eagle teaches that the identifiers are sent up to the server where the entities associated with the identifiers have not previously interacted,” and “Petitioner now relies on situations that are not taught by Eagle, are internally contradictory, or would require a coincidental confluence of factors.” *Id.* at 6. Patent Owner contends that “Petitioner ignores that Eagle uses ‘interactions between devices’ as a proxy for “interactions between people” and fails to explain “how Eagle’s system could ‘generate inferred data’ without doing so.” *Id.* at 10.

Petitioner asserts that Eagle’s list of “likely friends and acquaintances” constitutes the claimed “stored state.” *See* Pet. Reply 13–16. Petitioner points out that Eagle discloses (1) generating “automatically created lists of likely friends and acquaintances” and (2) “users’ profiles (which are indisputedly (sic) stored in the server) are ‘further populated’ with these lists.” Pet. Reply 15 (citing Ex. 1004 ¶¶ 9, 67; Pet. 33–35; Ex. 1003, Williams Decl. ¶¶ 91, 119–125). Noting that Eagle “never refers to dynamic determinations” of such lists, as suggested by Patent Owner, Petitioner contends that Patent Owner “ignores Eagle’s express teaching of ‘further populat[ing]’ the stored profile with this information. *Id.* at 14

Claim limitation 1.d does not require that the previous interactions with the server be between the devices associated with the first and second unique IDs. Instead, claim limitation 1.d distinguishes devices having the

first and second unique IDs from entities and explicitly recites the interactions utilizing the server are between entities associated with the first and second devices. Claim limitation 1.d recites “communicating further information to the first wireless device [(Petitioner maps the first wireless device to Eagle’s requester)] . . . said further information . . . based, at least in part, upon a stored state resulting from previous interactions utilizing said server between the entities associated with the first and second unique identifiers.” Eagle discloses that users connect to a web server to populate the profile database. Ex. 1004 ¶ 46. “[T]he user may also associate a ‘level of interest’ weighting value that can be used in a matchmaking process performed by the server to better identify other participants with whom direct communications are likely to be rewarding.” *Id.* ¶ 47. As Petitioner points out, in Eagle, a user’s profile includes “‘inferred data’ about device users generated from previous ‘interactions’ between the devices monitored by the server.” Ex. 1003, Williams Decl. ¶ 122; Ex. 1004 ¶ 56. Eagle’s “inferred data” includes a list of the user’s “likely friends.” Ex. 1004 ¶¶ 56, 66–67. Petitioner maps the user’s list of “likely friends” to the claimed “stored state” and notes that the user’s list of “likely friends” is used to create a “trust network.” *Id.* In claim limitation 1.d the claimed “stored data” must, at least in part, result from “previous interactions utilizing said server.” Moreover, claim limitation 1.d recites that those previous interactions utilizing the server must be “between the *entities* associated with the first and second unique identifiers.” *See* claim 1. Petitioner asserts that “by processing proximity data, a given user’s profile may be further populated with inferred data, such as one or more automatically created lists of likely friends and acquaintances that can be used to create a trust network.” Ex. 1003, Williams Decl. ¶ 119. According to Petitioner, the list

of likely friends is a list “resulting from previous interactions utilizing said server between the entities associated with the first and second unique identifiers.” *Id.*

Eagle discloses that a user uploads a friends list and interest criteria. Ex. 1004 ¶ 56. Regardless of the interest criteria, a user may request that alerts be sent only to a “trusted person.” *Id.* As a user’s device, e.g., device 1 (identified by a unique ID) associated with entity 1, encounters other proximate devices, e.g. devices 2–4, Eagle’s server may infer a list of “likely friends” of user 1, further populating user 1’s profile with an automatically created list of likely friends. Ex. 1003, Williams Decl. ¶ 122; Ex. 1004 ¶¶ 56, 66, 67. In addition, as user 1’s device encounters devices for the first time, device 1 sends a notification (request) to the server and the server compare’s the profile of the identified device to the profile of the requester device (i.e., the profile of user 1, which includes user 1’s accumulated list of “likely friends”).

Petitioner contends that if the server alerts a user to a likely friend, that alert is generated based on a stored state in the server and that the stored state in the server is the result of previous interactions utilizing the server between the entities associated with the first and second unique identifiers, e.g., entity associated with device 1 (user 1) and the entity associated with the identified device (e.g., user 5’s device). Pet. Reply 5–6. To support its contention Petitioner asserts that “the devices and the server monitor ‘proximity and interaction behaviors’ to create ‘inferred data, such as one or more automatically created lists of likely friends and acquaintances’ that is stored by the server in the user profile.” *Id.* at 5 (citing Ex. 1004 ¶ 67, Pet. 33–36, 51–52). Although Petitioner argues that these previous interactions are “monitored by the server” (*id.* at 5–6) the basis of Petitioner’s assertion

that the stored state results from previous interactions *between the entities associated with the first and second unique identifiers* requires further analysis under a construction that does not require a one-to-one correspondence between devices, e.g. a construction that recognizes an entity may be associated with multiple devices.

Although claim 1 recites the previous interactions utilizing the server are between entities associated with the first and second unique identifiers, claim 1 does not further limit the interactions or the type of association between the entities. As Patent Owner acknowledges, an entity may be associated with multiple devices, e.g., devices 2 and 5 may be associated with the same entity. PO Sur-reply 4. For example, devices 2 and 5 may be used by different drivers of the same taxi service. Where device 1's encounter with device 2 expands the profile for the user of device 1 to include the user of device 5 as a likely friend of user 1, the alert that device 1 receives upon encountering device 5 results from a previous interaction between the entity associated with device 1 and the entity associated with device 5, i.e., the same entity that is associated with device 2. This would satisfy claim limitation 1.d, because the alert to device 1 concerning device 5 is the result of a previous interaction utilizing the server between the entities associated with devices 1 and device 5, i.e., the previous interaction between devices 1 and 2.

For the reasons discussed above, we find that Petitioner has demonstrated Eagle discloses the subject matter of claim limitation 1.d under any construction of "stored state."

f) Claim limitation 1.e

Claim limitation 1.e, in pertinent part, recites that the stored state comprises a friends list associated with the entity associated with the second

device, and that the comparing step (carried out by the server) “comprises the inclusion of an entity associated with the first wireless device being included in said friends list [i.e., the friends list of the entity associated with the second wireless device] and resulting in access to the otherwise private social network content of the entity associated with the second wireless device.”

Referencing its discussion of claim limitation 1.d, Petitioner cites Eagle as disclosing a list of likely friends as the stored state and its argument that the social content information in the alert message from the server is based on that stored state, at least because the alert message is shared only with the list of likely friends and because Eagle discloses the list of likely friends is sent as part of the social content. Pet. 37–38 (citing Ex. 1004 ¶¶ 7, 56, 60, 66–67).

Patent Owner asserts that the claimed “stored state” cannot exist in Eagle because in Eagle “the only time the request signal is sent to the server is, it’s the first time the devices come into interaction with each other.” Ex. 1038, Foley Tr. 30:7–12; *see* PO Resp. 1, 36–37.

Claim limitation 1.e defines the “stored state” as comprising a list of friends of the entity associated with the second unique identifier (e.g., a second user). Eagle includes (i) an initial list of friends uploaded to the server by the entity corresponding to the first unique ID (e.g., a first user or “requestor”) and (ii) a list of “likely friends” inferred by the server from proximate encounters with other devices, such that the first user’s list of friends and likely friends is part of the stored state that results from the entities’ previous interactions with the server. Ex. 1004 ¶ 56. Although in Eagle, the server may infer a list of likely friends for the entity associated with any device, that feature is not required for our analysis. When Eagle

encounters a device that corresponds to the second unique identifier, the server determines if the entities associated with the first and second unique identifiers are friends or likely friends based on the stored state that exists as a result of the list of friends and the list of likely friends of the entities developed from their previous interactions with the server. *Id.* ¶¶ 20–21, 56. In the case of the list of likely friends, if one of the entities is on the other entity’s inferred list, e.g., the entity associated with the second wireless device (the identified device) is included on the list of friends inferred for first wireless device (the requester device), the alert that is sent by the server is a result of previous interactions utilizing the server between the *entities* associated with the first and second unique IDs. *Id.* ¶¶ 56–58, 66–67.

Even if we limited the claim as Patent Owner asserts, however, the limitation would be met by the case in which a “stored state” exists based on previous interactions in Eagle—i.e., where the ID of the device in proximity has not been encountered recently and has been removed to conserve memory, but upon being detected again the server obtains info based on previous interactions stored in the server (what PO call a “corner case”). Accordingly, we find that Petitioner has demonstrated that Eagle discloses claim limitation 1.e under either construction of “stored state.”

g) Obviousness

Noting that the subject matter of the ’129 patent and Eagle concern facilitating communications among wireless devices, Petitioner contends that, to the extent any further disclosure is required, it would have been obvious to a person of ordinary skill to determine whether an alert may be sent only to devices within a trust network based on profile data. Pet. 21–25. Petitioner asserts that at a minimum it would have been obvious to use a list

of likely friends or mutual friends when no friends list is available. *Id.* at 22–23.

Patent Owner contends that Petitioner’s obviousness arguments cannot cure the shortcomings of its anticipation theories. PO Resp. 49. Patent Owner again emphasizes its arguments that to meet claim element 1b Petitioner cites Eagle’s teachings about devices that have not previously interacted and therefore cannot meet claim element 1d, which requires previous interactions between entities associated with the devices. *Id.* at 51; *see also* PO Sur-reply 19. As discussed above, Petitioner has demonstrated Eagle discloses claim element 1.d under a construction of stored state that requires a one-to-one correspondence between device and entities and a construction that is not limited to such a one-to-one correspondence.

Petitioner further responds that “[Patent Owner] inappropriately suggests that Eagle is not analogous art because it is purportedly ‘limited to connecting “new” people’ while ‘[i]n contrast, the ’129 specification refers to “social networking” generally.’” Pet. Reply 19 (alteration in original) (quoting PO Resp. 49). Noting that Patent Owner does not dispute that both the ’129 patent and Eagle concern facilitating wireless communications, Petitioner argues that both the ’129 patent and Eagle are further concerned with security and privacy in peer-to-peer wireless communications. *Id.* at 19–20; *see also* Pet. 24–25.

We agree with Petitioner that, notwithstanding their differences, to a person of ordinary skill, the ’129 patent and Eagle address sufficiently related subject matter. Having determined that Eagle discloses the limitations of claim 1, we find that claim 1 would have been obvious to a person of ordinary skill over Eagle.

h) Conclusion as to Claim 1

For the reasons discussed above, we conclude that Petition has demonstrated by a preponderance of the evidence that Eagle discloses the limitations of claim 1 to a person of ordinary skill for purposes of anticipation under 35 U.S.C. § 102. We further find that, to the extent Eagle does not explicitly disclose claim limitation 1.d, Petitioner has demonstrated by a preponderance of the evidence that Eagle discloses or suggests all the limitations of claim 1 to a person of ordinary skill for purposes of rendering claim 1 obvious under 35 U.S.C. § 103.

3. Claim 16

Independent claim 16 is drawn to a server and recites limitations similar to those of method claim 1. Petitioner cites Eagle as disclosing the preamble of claim 16. Pet. 48 (referencing Petitioner’s analysis of the preamble of claim 1). As to the receiver of claim limitation 16.a, Petitioner references its analysis of claim limitations 1.a and 1.b and notes Eagle’s disclosure that the requester device sends a notification message including its own unique Requester ID and the identifier of the identified device to the server over a long range cellular network. *Id.* at 49–50. As to the data processor recited in claim limitation 16.b, Petitioner references its analysis of claim limitations 1.c and 1.d, noting that Eagle’s “profile data” associated with the identified device includes preferences concerning what information may be shared and argues that, at a minimum, it would have been obvious for the server to include a data processor to process the incoming notification message. *Id.* at 50–51. Turning to the transmitter in claim limitation 16.c, Petitioner references its analysis of claim limitation 1.d and notes that Eagle discloses the server includes a message transmitter. *Id.* at 51–52. As to claim limitation 16.d, which recites the further information

comprises content relating to at least the social network content that is dependent upon the stored state comprising a list of friends associated with the entity associated with the second wireless device, Petitioner references its analysis of claim limitation 1.e. *Id.* at 52–53.

Patent Owner contends that Eagle does not disclose claim limitations 16.c and 16.d for the same reasons it contends Eagle does not disclose claim limitations 1.d and 1.e, respectively. *See* PO Resp. 25, 47.

Having found that Eagle discloses claim limitations 1.d and 1.e, we find that Eagle discloses claim limitations 16.c and 16.d for similar reasons.

4. *Claims 2 and 17*

Claims 2 and 17 depend from claims 1 and 16, respectively, and recite that the first unique identifier is associated with a person and the second unique identifier is associated with a business entity. Petitioner cites Eagle as disclosing devices may be associated with specific people, such as trade show attendees, who may be associated with various business entities. Pet. 40 (citing Ex. 1004 ¶¶ 60–61, 63; Ex. 1003, Williams Decl. ¶¶ 132–135).

Patent Owner does not respond explicitly to Petitioner’s contentions concerning claims 2 and 17. Having considered all the evidence and arguments of record, we find that Petitioner has demonstrated Eagle discloses the limitations of claims 2 and 17.

5. *Claim 3 and 18*

Claims 3 and 18 depend from claims 1 and 16, respectively, and recite that at least one of the first or second identifiers comprises one or more of a number of identification formats, including a Bluetooth Device Address. In addition to its discussion of claim limitations 1.a and 1.b, Petitioner cites Eagle as disclosing the requester device and the identified device exchange

unique identifiers in the form of a Bluetooth Device Address. Pet. 41–42 (citing Ex. 1004 ¶¶ 3, 31, 45, 50–51; Ex. 1003, Williams Decl. ¶¶ 136–138).

Patent Owner does not respond explicitly to Petitioner’s contentions concerning claims 3 and 18. Having considered all the evidence and arguments of record, we find that Petitioner has demonstrated Eagle discloses the limitations of claims 3 and 18.

6. *Claims 4 and 19*

Claims 4 and 19 depend from claims 1 and 16, respectively, and recite that the disclosure policy specifies one or more items for an entity or person associated with the second device, including do/do not disclose personal name, age, or other personal details. In its addition to its discussion of claim limitation 1.c, Petitioner cites Eagle as disclosing a profile database may include “preference data” that specifies when to disclose information about the user associated with the identified device, including the user’s name, contact information, age, sex, religion, city, “interests,” or other personal details. Pet. 42–43 (citing Ex. 1004 ¶¶ 7, 12, 50, 56–57; Ex. 1003, Williams Decl. ¶¶ 139–141).

Patent Owner does not respond explicitly to Petitioner’s contentions concerning claims 4 and 19. Having considered all the evidence and arguments of record, we find that Petitioner has demonstrated Eagle discloses the limitations of claims 4 and 19.

7. *Claims 5 and 20*

Claims 5 and 20 depend from claims 1 and 16, respectively, and recite that “the disclosure policy specifies disclosure of information as a function of the identifier of the first wireless device as a requesting entity.” In addition to its discussion of claim limitations 1.a and 1.e, Petitioner cites Eagle as disclosing that certain profile information is shared only with

certain devices in a “trust network” created from a list of “likely friends” and that whether the requester device is in the “trust network” of the identified device is a function of the identifier of the requester device. Pet. 44 (citing Ex. 1004 ¶¶ 48, 56, 66–67; Ex. 1003, Williams Decl. ¶¶ 142–143).

Patent Owner does not respond explicitly to Petitioner’s contentions concerning claims 5 and 20. Having considered all the evidence and arguments of record, we find that Petitioner has demonstrated Eagle discloses the limitation of claims 5 and 20.

8. *Claim 7*

Claim 7 depends from claim 1 and recites an entity associated with the second wireless device setting data in the discloser policy before receiving the second identifier. In addition to its discussion of claim limitations 1.b and 1.c, Petitioner cites Eagle as disclosing the identified device includes “preference data” set by its user to indicate when information in the profile should be shared. Pet. 44–45 (citing Ex. 1004 ¶¶ 45, 50, 57).

Patent Owner does not respond explicitly to Petitioner’s contentions concerning claim 7. Having considered all the evidence and arguments of record, we find that Petitioner has demonstrated Eagle discloses the limitations of claim 7.

9. *Claims 10 and 25*

Claims 10 and 25 depend from claims 1 and 16, respectively, and recite the further information provided to the first wireless device is dependent upon a priority of the second wireless device identifier, a class the second wireless device belongs to, a list the second wireless identifier is included on, and/or a list the second wireless identifier is not included on. Petitioner references in its discussion of claim 1, and specifically claim limitation 1.d. Pet. 45–46. As evidence that the further information

provided to the first wireless device is dependent upon a list that the second wireless identifier is included on, Petitioner cites Eagle as disclosing the requester device in the identified device can be set to establish links only within a “trust network.” *Id.* at 46 (citing Ex. 1004 ¶ 66). Petitioner further notes that even if the requester device is permitted to receive information by being part of the “trust network” for the identified device, the requester device will not receive an alert unless the identified device also belongs in a “trust network” created from list of “friends” or “likely friends” for the requester device. *Id.* (citing Ex. 1004 ¶¶ 56, 66, 67).

Patent Owner does not respond explicitly to Petitioner’s contentions concerning claims 10 and 25. Having considered all the evidence and arguments of record, we find that Petitioner has demonstrated Eagle discloses the limitations of claims 10 and 25.

10. Claims 11 and 26

Claims 11 and 26 depend from claims 1 and 16, respectively, and recite that the further information provided to the first wireless device comprises at least one of a number of items including a visual identifier of a service or individual, information about an available service, and a content type field specifying one or more of a picture, a media file, XML/AJAX. In addition to its analysis of claim limitation 1.d, Petitioner cites Eagle’s disclosure that an alert message may contain a photograph identifying the owner of an identified device or information about products and services offered by the owner of the identified device. Pet. 46–48 (citing Ex. 1004 ¶¶ 7, 21, 61, 63, Figs. 1a–1c; Ex. 1003, Williams Decl. ¶¶ 151–154).

Patent Owner does not respond explicitly to Petitioner’s contentions concerning claims 11 and 26. Having considered all the evidence and

arguments of record, we find that Petitioner has demonstrated Eagle discloses the limitations of claims 11 and 26.

VII. CONCLUSION⁴

Having considered all the evidence and arguments of record we conclude that Petitioner has shown by a preponderance of the evidence that claims 1–5, 7, 10, 11, 16–20, 25, and 26 are unpatentable under 35 U.S.C. § 102 as anticipated by Eagle and under 35 U.S.C. § 103 as obvious over Eagle.

In summary,

Claims	35 U.S.C. §	Basis	Claims Shown Unpatentable	Claims Not shown Unpatentable
1–5, 7, 10, 11, 16–20, 25, 26	102	Eagle	1–5, 7, 10, 11, 16–20, 25, 26	
1–5, 7, 10, 11, 16–20, 25, 26	103	Eagle	1–5, 7, 10, 11, 16–20, 25, 26	
Overall Outcome			1–5, 7, 10, 11, 16–20, 25, 26	

VIII. ORDER

In consideration of the above it is:

ORDERED that claims 1–5, 7, 10, 11, 16–20, 25, and 26 are unpatentable;

⁴ Should Patent Owner wish to pursue amendment of the challenged claims in a reissue or reexamination proceeding subsequent to the issuance of this 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).

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

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