

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

FOURSQUARE LABS, INC.,
Petitioner,

v.

BOARDACTIVE CORPORATION,
Patent Owner.

IPR2023-00918
Patent 10,621,620 B2

Before JAMES A. TARTAL, MICHAEL L. WOODS, and
ROBERT J. SILVERMAN, *Administrative Patent Judges*.

SILVERMAN, *Administrative Patent Judge*.

DECISION
Granting Institution of *Inter Partes* Review
35 U.S.C. § 314

I. INTRODUCTION

Petitioner Foursquare Labs, Inc. (“Petitioner”) filed a Petition (Paper 1, “Pet.”) requesting an *inter partes* review of claims 1–29 (“Challenged Claims”) of U.S. Patent No. 10,621,620 B2 (Ex. 1001, “the ’620 patent”). Petitioner filed a Declaration of Steven H. Goldberg (Ex. 1002) with its Petition.

Patent Owner BoardActive Corporation (“Patent Owner”) filed a Preliminary Response (Paper 7, “Prelim. Resp.”).

Petitioner presents thirteen Grounds, arguing that the Board should institute an *inter partes* review of various Challenged Claims of the ’620 patent. Pet. 5–68.

Patent Owner argues that the Board should exercise its discretion to dismiss the Petition, because the Petition lacks the particularity and specificity required by 35 U.S.C. § 312(a). Prelim. Resp. 4–9. For the reasons provided below, such an exercise of discretion is not warranted.

We have authority to determine whether to institute an *inter partes* review. *See* 35 U.S.C. § 314; 37 C.F.R. § 42.4(a) (2022). Under 35 U.S.C. § 314(a), we may not authorize an *inter partes* review unless the information in the petition and the preliminary response “shows that there is a reasonable likelihood that the petitioner would prevail with respect to at least 1 of the claims challenged in the petition.”

For the reasons that follow, and solely for the purposes of this Decision, we determine that at least Grounds 7–13 of the Petition (as identified below) satisfy the standard for institution. Accordingly, we institute an *inter partes* review, as to all of the Grounds presented in the Petition.

II. BACKGROUND

A. *Real Parties-in-Interest*

Petitioner identifies itself, Foursquare Labs, Inc., as the real party-in-interest. Pet. 68.

Patent Owner identifies itself, BoardActive Corporation, as the real party-in-interest. Paper 5, 2.

B. *Related Matters*

As required by 37 C.F.R. § 42.8(b)(2), the parties identify the following related matter (Pet. 68; Prelim. Resp. 2): *BoardActive Corp. v. Foursquare Labs., Inc.*, 22-cv-00597 (D. Del. 2022).

Patent Owner also identifies IPR2023-00919 as a related matter. Prelim. Resp. 2

C. *The '620 Patent*

The '620 patent, which is titled “Platform for Location and Time Based Advertising,” relates to “an online platform for managing geolocation and time-based advertising and methods for managing and/or delivering location and time based advertisements.” Ex. 1001, 1:1–2; 1:21–24.

In one aspect, the '620 patent discloses “media assets” that may be used to trigger the delivery of advertising content. *Id.* at 8:56–59. Such media assets may include “physical assets” (e.g., billboards and commercial centers) and “virtual assets” (e.g., virtual events and television networks). *Id.* at 8:63–9:5, *see also id.* at 13:8–11 (“In some instances the geographic location does not need to correspond to a physical board and can be a purely digital signage (i.e. virtual signage).”)

The online platform may include an analytics layer that tracks and stores data about a consumer's behavior. Ex. 1001, 10:11–13. The geolocation of a mobile device may also be tracked. *Id.* at 13:39–43. The content to be distributed may be segmented into categories and tailored for delivery to consumers having particular profile characteristics. *Id.* at 9:64–66. In view of these features, the online platform may deliver content to particular consumers that are at particular geographic locations, such as near a billboard or a store. *Id.* at 10:59–62, *see also id.* at 11:37–39 (“[U]sers who drive by a geolocation may be ‘beaconed’ or provided with promotional content through . . . an [sic] mobile device application.”), 13:44–47 (“[T]he online platform may be configured to identify and retrieve advertisement content associated with real and/or virtual signage corresponding to the geolocation transmitted by the mobile device.”)

D. Illustrative Claims

As noted previously, Petitioner challenges claims 1–29 of the '620 patent, of which claims 1, 28, and 29 are independent. Pet. 1; Ex. 1001, 37:46–40:61. Claims 1, 28, and 29, which illustrate the challenged subject matter, are reproduced below, with the addition (in brackets) of the designations provided in Petitioner's Appendix (*see* Pet. v–xii).

1. [preamble] A method comprising:
 - [1(a)] registering asset data, wherein registering the asset data comprises at least one of the following:
 - [1(a)(i)] registering a first geolocation associated with one of the following:
 - [1(a)(i)(1)] a physical asset, and
 - [1(a)(i)(2)] a virtual asset;

[1(b)] receiving media content to be associated with at least one registered asset, wherein the media content is configured to be operative with a content interaction layer and a consumer tracking layer to enable:

[1(b)(i)] interacting with a consumer of the media content in conjunction with, at least in part, the media content, and

[1(b)(ii)] tracking the consumer of the media content in conjunction with, at least in part, the media content;

[1(c)] specifying a plurality of rules for selecting the media content to deliver to the consumer, wherein specifying the plurality of rules comprises specifying:

[1(c)(i)] a first rule for delivering the media content, the first rule being associated with at least one element of profile data corresponding with the consumer, and

[1(c)(ii)] a second rule for updating the media content, the second rule being associated with a second geolocation;

[1(d)] receiving an activation command for triggering a delivery of the media content, wherein receiving the activation command comprises at least one of the following:

[1(d)(i)] determining that a spatial trigger has occurred,

[1(d)(ii)] determining that a time-based trigger has occurred, and

[1(d)(iii)] determining that an event has occurred,

[1(e)] comparing the first rule and the at least one element of profile data associated with the consumer in order to determine whether to deliver the media content to the consumer;

[1(f)] delivering the media content to a device associated with the consumer when the first rule is met;

[1(g)] tracking a location associated with the consumer further to the delivery of the media content;

[1(h)] comparing the second rule and the location in order to determine whether to update the media content; and

[1(i)] updating the media content at the device associated with the consumer when the second rule is met.

Ex. 1001, 37:46–38:22.

28. [Preamble] A method comprising:

[28(a)] registering asset data, wherein registering the asset data comprises at least one of the following:

[28(a)(i)] registering a first geolocation associated with one of the following:

[28(a)(i)(1)] a physical asset, and

[28(a)(i)(2)] a virtual asset;

[28(b)] receiving media content to be associated with at least one registered asset;

[28(c)] specifying a plurality of rules for delivering the media content, wherein specifying the plurality of rules comprises specifying:

[28(c)(i)] a first delivery rule associated with at least one element of profile data corresponding with a recipient of the media content, and

[28(c)(ii)] a second delivery rule associated with a second geolocation at which the recipient is tracked;

[28(d)] receiving an indication that the recipient is proximate to the first geolocation, comparing the first delivery rule and the at least one element of profile data associated with the recipient;

[28(e)] tracking a location associated with the recipient in response to a matching comparison;

[28(f)] comparing the second delivery rule and the location in order to determine whether the recipient is proximate to the second geolocation; and

[28(g)] delivering, upon fulfillment of the first delivery rule and the second delivery rule, the media content to the recipient.

Id. at 40:4–32.

29. [Preamble] A computer-readable medium comprising a set of instructions which when executed perform a method, the method comprising:

[29(a)] registering asset data, wherein registering the asset data comprises at least one of the following:

[29(a)(i)] registering a first geolocation associated with one of the following:

[29(a)(i)(1)] a physical asset, and

[29(a)(i)(2)] a virtual asset;

[29(b)] receiving media content to be associated with at least one registered asset;

[29(c)] specifying a plurality of rules for delivering the media content, wherein specifying the plurality of rules comprises specifying:

[29(c)(i)] a first delivery rule associated with a period of time, and

[29(c)(ii)] a second delivery rule associated with a second geolocation at which a recipient is tracked during the period of time;

[29(d)] receiving an indication that the recipient is proximate to the first geolocation;

[29(e)] tracking a location associated with the recipient in response to a matching comparison;

[29(f)] comparing the second delivery rule and the location in order to determine whether the recipient is proximate to the second geolocation; and

[29(g)] delivering, upon fulfillment of the first delivery rule and the second delivery rule, the media content to the recipient.

Id. at 40:33–61.

E. Prior Art and Asserted Grounds of Unpatentability

Petitioner asserts the following grounds of unpatentability (Pet. 1–2):

Ground	Claims Challenged	35 U.S.C. §	Basis/Reference(s)
1	28, 29	102	Felt (Verizon) ¹
2	28, 29	103	Felt (Verizon), Kerr ² and/or Geer ³
3	1–6, 11–27	103	Felt (Verizon), Thaper (Cellco) ⁴
4	1–6, 11–27	103	Felt (Verizon), Muhire ⁵
5	1–6, 11–27	103	Felt (Verizon), Muhire, Kerr
6	7–10	103	Felt (Verizon), Kerr, Muhire, Sehn ⁶

¹ US 2015/0095124 A1, pub. Apr. 2, 2015 (Ex. 1004). Petitioner (*see* Pet. iv) identifies this reference by the name of the assignee identified thereon — “Verizon” — although the first named inventor is Felt. Ex. 1004, code (72). We identify this reference as “Felt (Verizon).”

² US 2016/0309292 A1, pub. Oct. 20, 2016 (Ex. 1005).

³ US 2015/0262214 A1, pub. Sept. 17, 2015 (Ex. 1006).

⁴ US 8,391,886 B1, iss. March 5, 2013 (Ex. 1010). Petitioner omits this reference from the identification of Grounds (Pet. 1–2), but includes it in the analyses of Ground 3 (*id.* at 26–27) and Ground 7 (*id.* at 55), identifying the reference as “Cellco.” In view of the named inventor on the reference, we identify this reference as “Thaper (Cellco).” *See* Ex. 1010, code (54).

⁵ WO 2017/079838 A1, pub. May 18, 2017 (Ex. 1007).

⁶ US 9,094,137 B1, iss. July 28, 2015 (Ex. 1008).

Ground	Claims Challenged	35 U.S.C. §	Basis/Reference(s)
7	1, 11–27	103	Adharapurapu (Alcatel), ⁷ Kerr
8	1, 11–27	103	Adharapurapu (Alcatel), Kerr, Muhire
9	1–6, 22–27	103	Adharapurapu (Alcatel), Kerr, Felt (Verizon)
10	1–6, 22–27	103	Adharapurapu (Alcatel), Kerr, Muhire, Felt (Verizon)
11	7–10	103	Adharapurapu (Alcatel), Kerr, Muhire, Felt (Verizon), Sehn
12	28, 29	102	Adharapurapu (Alcatel)
13	28, 29	103	Adharapurapu (Alcatel), Kerr and/or Geer

III. DISCRETIONARY DENIAL

Institution of *inter partes* review is discretionary. *See Harmonic Inc. v. Avid Tech., Inc.*, 815 F.3d 1356, 1367 (Fed. Cir. 2016) (“[T]he [U.S. Patent and Trademark Office] is permitted, but never compelled, to institute an IPR proceeding.”)

Patent Owner contends that “[t]he Petition’s lack of particularity has resulted in voluminous and excessive Grounds, including duplicated Grounds addressing different sets of claims,” and that Petitioner’s failure to state precise grounds of unpatentability “has adversely affected Patent Owner’s ability to present a reasoned response.” Prelim. Resp. 4–5.

In support, Patent Owner (Prelim. Resp. 5–6) cites *Adaptics Ltd. v. Perfect Co.*, IPR2018-01596, 2019 Pat. App. LEXIS 4775, *25–*26 (PTAB

⁷ EP 2 424 278 A1, pub. Feb. 29, 2012 (Ex. 1009). Petitioner (*see* Pet. iv) identifies this reference by the name of the assignee identified thereon — “Alcatel” — although the named inventor is Adharapurapu. Ex. 1009, code (72). We identify this reference as “Adharapurapu (Alcatel).”

Mar. 6, 2019), wherein the multiple alternative combinations of cited prior art references yielded “hundreds of possible combinations.” Patent Owner concedes that the present Petition is not as complicated as that in *Adaptics*, but contends that the Petition, nevertheless, “does result in over twenty (20)” combinations of references. Prelim. Resp. 6.

Patent Owner further contends that “[t]he Petition fails to meet the requirements of 35 U.S.C. § 312(a) and 37 C.F.R. § 42.104(b)(4), because it lacks specificity as to where each element of the claims of the ’620 patent is found in the cited prior art. Prelim. Resp. 7. Patent Owner explains:

String cites to multiple paragraphs in the references and Declaration are relied on throughout the Petition with little or no explanation of what those paragraphs teach or explain, and no quoted sections of the references identify where and what is being relied on in a reference.

Id. (citing Pet. 22 (Element 1(b)(ii)); Pet. 10 (Element 28(c)(ii)); Pet. 13 (Element 28(g)); Pet. 15 (Geer discussion); Pet. 28 (Claim 12); Pet. 30 (Claim 16); Pet. 32 (Claim 20); Pet. 33 (Claim 22)).

Patent Owner also argues that, with regard to Ground 1, the text of the Petition enumerates claim elements differently than appears in the Appendix of Claims. Prelim. Resp. 7–8 (citing Pet. x–xi, 6, 16–17).

In addition, Patent Owner argues that the Petition’s use of string citations and “conclusory statements” in the Goldberg Declaration obscures Petitioner’s positions. *See* Prelim. Resp. 8–9.

Our Consolidated Trial Practice Guide advises parties on the composition of submissions to the Board:

Although parties are given wide latitude in how they present their cases, the Board’s experience is that the presentation of an overwhelming number of issues tends to detract from the argument being presented, and can otherwise

cause meritorious issues to be missed or discounted. Thus, parties should avoid submitting a repository of all the information that a judge could possibly consider, and instead focus on concise, well-organized, easy-to-follow arguments supported by readily identifiable evidence of record.

Patent Trial and Appeal Board, Consolidated Trial Practice Guide 39 (Nov. 2019) (<https://www.uspto.gov/TrialPracticeGuideConsolidated>).

The present Petition identifies thirteen Grounds, which employ a total of seven prior art references. *See* Pet. 1–2. Patent Owner contends that the Petition’s use of alternative combinations, within particular Grounds, results in “over twenty (20)” distinct bases for the invalidity of one or more claims. Prelim. Resp. 6. As Patent Owner concedes (*id.*), this is a far cry from the situation in *Adaptics*, where the Board confronted “hundreds of possible combinations.” *Adaptics*, 2019 Pat. App. LEXIS 4775, *25–*26.

In addition, although the use of alternative prior art bases and string citations, in a petition, may present various challenges, we do not regard the present Petition as exceeding reasonable limits of particularity and specificity. Further, the alleged discrepancies in how the Petition “pars[es] the elements” of claim 28 (Prelim Resp. 7) do not appear to have impaired Patent Owner’s analysis thereof. *See id.* at 19–26, 39–43.

Moreover, the alleged deficiencies that Patent Owner identifies (*see* Prelim. Resp. 9) might be employed in arguments that Petitioner fails to establish a reasonable likelihood that it would prevail with respect to at least one claim of the ’620 patent challenged in the Petition. Indeed, Patent Owner does so. *See id.* at 26.

In view of the foregoing, we decline to exercise discretion under 35 U.S.C. § 314(a) to deny institution. Accordingly, the following analysis

considers whether Petitioner has met the “reasonable likelihood” standard for institution under 35 U.S.C. § 314(a).

IV. ANALYSIS OF PETITION

A. *Legal Standards*

1. *Anticipation*

To establish anticipation under 35 U.S.C. § 102, each and every element in a claim, arranged as recited in the claim, must be found in a single prior art reference. *Net MoneyIN, Inc. v. VeriSign, Inc.*, 545 F.3d 1359, 1369 (Fed. Cir. 2008); *Karsten Mfg. Corp. v. Cleveland Golf Co.*, 242 F.3d 1376, 1383 (Fed. Cir. 2001). Each element of the challenged claim must be found, either expressly or inherently, in the single prior art reference. *Verdegaal Bros., Inc. v. Union Oil Co. of Cal.*, 814 F.2d 628, 631 (Fed. Cir. 1987). When evaluating a prior art reference in the context of anticipation, the reference must be “considered together with the knowledge of one of ordinary skill in the pertinent art.” *In re Paulsen*, 30 F.3d 1475, 1480 (Fed. Cir. 1994) (citing *In re Samour*, 571 F.2d 559, 562 (CCPA 1978)). “[A] reference can anticipate a claim even if it ‘d[oes] not expressly spell out’ all the limitations arranged or combined as in the claim, if a person of skill in the art, reading the reference, would ‘at once envisage’ the claimed arrangement or combination.” *Kennametal, Inc. v. Ingersoll Cutting Tool Co.*, 780 F.3d 1376, 1381 (Fed. Cir. 2015) (quoting *In re Petering*, 301 F.2d 676, 681 (CCPA 1962)) (alteration in original).

In order to be anticipatory, a prior art reference must enable a person of ordinary skill in the art to make the invention without undue experimentation. *See Finisar Corp. v. DirecTV Group, Inc.*, 523 F.3d 1323, 1336 (Fed. Cir. 2008). A sufficiently enabling anticipatory reference must

put the invention “in the possession” of the person of ordinary skill in the art. *See Impax Labs., Inc. v. Aventis Pharms. Inc.*, 545 F.3d 1312, 1315 (Fed. Cir. 2008).

2. *Obviousness*

A 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. *See 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 skill in the art; and (4) when in evidence, objective evidence of non-obviousness (i.e., so-called secondary considerations). *See Graham v. John Deere Co.*, 383 U.S. 1, 17–18 (1966). We also recognize that prior art references must be “considered together with the knowledge of one of ordinary skill in the pertinent art.” *Paulsen*, 30 F.3d at 1480 (citing *Samour*, 571 F.2d at 562).

B. *Claim Interpretation*

In an *inter partes* review, we construe claims using the same standard applied in a district court. *See* 37 C.F.R. § 42.100(b). Under this standard, claim terms are generally given their plain and ordinary meaning, as would have been understood by a person of ordinary skill in the art at the time of the invention and in the context of the entire patent disclosure. *Phillips v. AWH Corp.*, 415 F.3d 1303, 1313 (Fed. Cir. 2005) (en banc). The sources

available for guidance, when undertaking claim construction, “include both intrinsic evidence (*e.g.*, the patent specification and file history) and extrinsic evidence (*e.g.*, expert testimony).” *Vitronics Corp. v. Conceptronic, Inc.*, 90 F.3d 1576, 1582 (Fed. Cir. 1996).

“The Board is required to construe ‘only those terms . . . that are in controversy, and only to the extent necessary to resolve the controversy.’” *Realtime Data, LLC v. Iancu*, 912 F.3d 1368, 1375 (Fed. Cir. 2019) (quoting *Vivid Techs., Inc. v. Am. Sci. & Eng’g, Inc.*, 200 F.3d 795, 803 (Fed. Cir. 1999)).

Petitioner states that it “believes that the constructions of terms can be appreciated from their overall discussion and application of prior art herein, and does not require express construction at this time.” Pet. 4.

Patent Owner asserts that “[t]he term ‘[c]onsumer’ should be construed as a ‘user or person to whom an advertisement is sent to elicit engagement.’” Prelim. Resp. 11–12. Patent Owner further asserts that “all other claim terms should be given their plain and ordinary meaning as used in the ’620 patent specification and file history.” *Id.* at 14.

As to the term “consumer,” Patent Owner points to portions of the ’620 patent and its prosecution history. Prelim. Resp. 11–13 (quoting Ex. 1001, Abstr., 7:29–37;⁸ Ex. 2002, 52).

These citations do not appear to support Patent Owner’s proposed construction of “consumer.” Rather, the particular narrow meaning, of Patent Owner’s proposal, appears to be articulated by words, in the cited passages, other than the word “consumer.” The ’620 patent Abstract refers

⁸ Patent Owner incorrectly identifies the citation for the quoted passage. *See* Prelim. Resp. 12 (citing “Exh. 1001, 8:35–57”).

to “target[ing] consumer profiles” and “engaging the consumer at the right time/place, with the targeted profile.” Ex. 1001, Abstr. Similarly, the cited portion of the ’620 patent’s disclosure states that a platform administrator may interact “with its target content consumers.” *Id.* at 7:29–31. Further, the Notice of Allowance (Feb. 27, 2020) refers to claim language requiring “checking for consuming qualification for targeting by advertiser . . . by having a delivery rule corresponding to at least one element of PROFILE data.” Ex. 2001, 52. In Patent Owner’s cited examples from the intrinsic record, the focused definition that Patent Owner proposes — “user or person to whom an advertisement is sent to elicit engagement” (Prelim. Resp. 11) — is conveyed by words that surround the term “consumer,” as opposed to any special meaning of the term “consumer” itself. The Abstract refers to “target[ing] . . . profiles” and applying “the targeted profile.” Ex. 1001, Abstr. The ’620 patent disclosure refers to “target content.” *Id.* at 7:30. Similarly, the cited Notice of Allowance refers to “checking for . . . qualification for targeting by advertiser,” on account of the “PROFILE data.” Ex. 2001, 52.

Therefore, on the present record and for purposes of this Decision, we do not adopt Patent Owner’s proposed construction of the claim term “consumer.”

C. Level of Ordinary Skill

Petitioner contends that person of ordinary skill in the art to which the ’620 patent pertains “would have had a Bachelor of Science Degree in Computer Science, Electrical Engineering, Computer Engineering or equivalent, and about two to three years of practical experience.” Pet. 4. Petitioner further notes that “[a]dditional experience may substitute for

specific education, or specific education may substitute for experience.” *Id.* (citing Ex. 1002 ¶ 26).

Patent Owner states that “[a] person with ordinary skill in the relevant art at the time of invention — April 10, 2017 — would have a bachelor’s degree in computer science, electrical engineering, computer engineering, or an equivalent field and three years of experience working with digital advertising and geofencing.” Prelim. Resp. 10–11 (footnote omitted). Patent Owner further states that “[a]dditional education might compensate for less experience and vice-versa, but at a minimum, a bachelor’s degree is required.” *Id.* at 11.

The parties’ descriptions of the level of ordinary skill at the time of the invention do not appear to differ in any material way that would affect this Decision. However, at this stage of the proceeding, it is unclear whether it would be proper to require Patent Owner’s proposed requirement of “three years of experience working with digital advertising and geofencing.” Prelim. Resp. 10–11. Accordingly, for the purposes of this Decision, we adopt Petitioner’s description of the relevant level of skill in the art, because it appears to be consistent with the level of skill reflected in the ’620 patent and asserted prior art.

D. Prior Art References

1. Felt (Verizon)

Felt (Verizon) is a US patent application, published on April 2, 2015, titled “Method and System for Realtime Display or Distribution of Advertisements.” Ex. 1004, codes (12), (43), (54). The reference relates to “displaying marketing content at a predetermined location and at a predetermined time.” *Id.*, Abstr. Further, “[v]arious categories or criteria

may be tagged to the marketing content and may be displayed or distributed only when the various criteria are satisfied. *Id.* The reference discloses that advertisements may be presented “in realtime or near realtime based on the particular location of the advertisement or time of display” and that sponsors may “push the same or a similar advertisement/incentive to nearby potential customers. *Id.* ¶ 18. An embodiment involves “delivering marketing content to mobile or even stationary devices” *Id.* ¶ 21. Another embodiment involves distributing marketing content “to nearby mobile devices . . . users of which may have viewed the marketing content on [a] mobile unit.” *Id.* ¶ 44.

2. *Kerr*

Kerr is a US patent application, published on October 20, 2016, titled “Targeted Content Delivery.” Ex. 1005, codes (12), (43), (54). Kerr relates to “delivering targeted content to a wireless handset . . . communicatively coupled to a network.” *Id.*, Abstr. Specifically, the system transmits content to a handset based on an associated user profile having at least one user attribute. *Id.* In an example, Kerr discloses sending “text advertising a sale on ski equipment” to a user that “has indicated an interest in skiing.” *Id.* ¶¶ 133–34.

3. *Geer*

Geer is a US patent application, published on September 17, 2015, titled “Geofenced Event-Based Fan Networking: Methods.” Ex. 1006, codes (12), (43), (54). Geer relates to “to social networking at an event in a venue,” and more specifically “to providing such functionality through geolocated portable smart devices.” *Id.* ¶ 2. Geer discloses “offer[ing]

customized services to fans such as messaging, fan groups, friends networking, mementos, coupons, and contests.” *Id.* ¶ 6.

4. *Muhire*

Muhire is an international publication, published on May 18, 2017, titled “System and Method for Offering Automated Promotions and Special Offers in Real-Time.” Ex. 1007, codes (12), (43), (54). Muhire relates to “systems and methods that allow a user to save, manage time and budget via electronic means.” *Id.* ¶ 1. In one aspect, Muhire discloses “a system for offering promotions and special offers from sellers in real time to a user's portable multifunctional device.” *Id.* ¶ 32. Muhire also discloses a “Profile” feature that records, for example, a consumer’s order history, billing and shipping information, interests and preferences, and allows consumers to “get updates and information on their friends [and] merchants.” *Id.* ¶ 43.

5. *Sehn*

Sehn is a US patent, issued on July 28, 2015, titled “Priority Based Placement of Messages in A Geo-Location Based Event Gallery.” Ex. 1008, codes (12), (45), (54). Sehn relates to “creating an event gallery associated with an event using messages received from devices located within a geo-location fence. *Id.*, Abstr. Sehn discloses the use of an “advertising module” that “scan[s] the content of messages for a specific brand,” whereupon a “communication module” may send a message to a brand owner, “offering the brand owner an opportunity to prioritize the message in the event gallery.” *Id.*, 5:33–49.

6. *Adharapurapu (Alcatel)*

Adharapurapu (Alcatel) is a European patent application, published February 29, 2012, titled “Content delivery based on direction of mobility.” Ex. 1009, codes (12), (43), (54). Adharapurapu (Alcatel) relates to “delivering content to a mobile device based on the direction of mobility of the device.” *Id.*, Abstr. “Based on the mobility history of [the] mobile device, contents available and rules processor, the system decides on content to be sent to the mobile device.” *Id.* “[A] mobile service provider network . . . keeps track of location and direction of all the mobile devices . . . through base stations, where the subscriber has enabled the content delivery based on direction of mobility service.” *Id.* ¶ 15.

In an example, Adharapurapu (Alcatel) discloses that “[i]nformation saying ‘Road X closed for construction every Sunday from 6AM–3PM till August 2010’ will be sent to all the mobile devices that are in the vicinity of the road and have subscriber to the content delivery based on mobility service.” *Id.* ¶ 17. Adharapurapu (Alcatel) indicates that “[t]he content may be advertisements, weather update, traffic updates or any other information which may be beneficial to the mobile device . . . user and the content publishers.” *Id.* ¶ 16.

7. *Thaper (Cellco)*

Thaper (Cellco) is a US patent, issued on March 5, 2013, titled “Systems and Methods for Providing Mobile Handset Position to Software Applications.” Ex. 1010, codes (12), (45), (54). Thaper (Cellco) relates to techniques for “provid[ing] a quick effective way to provide an [sic] software application with information as to the location of a mobile station connected to a wireless network.” *Id.* at 2:19–21.

E. Petitioner's Grounds

Petitioner's Grounds 1–6 are based upon Felt (Verizon), either alone or in combination with other references. *See* Pet. 6–40. Petitioner's Grounds 7–13 are based upon Adharapurapu (Alcatel), either alone or in combination with other references. *See id.* at 40–68.

Patent Owner addresses the sufficiency of the cited references' teachings, with respect to Ground 1 and Ground 12. *See* Prelim. Resp. 19–29, 39–44. Patent Owner does not include any evidence of any proposed objective evidence of non-obviousness. *See id.* at 44–45. Patent Owner's arguments for Grounds 2–11 and 13 address only whether Petitioner shows a sufficient reason to combine the various references. *See id.* at 29–39.

For the reasons provided below, we determine that Petitioner demonstrates a reasonable likelihood that it would prevail with respect to at least one claim of the '620 patent challenged in the Petition. Specifically, at least Grounds 7–13 of the Petition satisfy this standard for instituting *inter partes* review.

1. Ground 1 (Anticipation by Felt (Verizon))

Petitioner contends that Felt (Verizon) anticipates independent claims 28 and 29 of the '620 patent. *See* Pet. 6–13, 16–18.

Petitioner argues that paragraphs 26, 28, 31, 32, 34–36, 42, 46, and 67 of Felt (Verizon) teach the following elements of claim 28:

[28(a)] registering asset data, wherein registering the asset data comprises at least one of the following:

[28(a)(i)] registering a first geolocation associated with one of the following:

[28(a)(i)(1)] a physical asset, and

[28(a)(i)(2)] a virtual asset

See Pet. 6–8.⁹

In this regard, Felt (Verizon) discloses databases that correlate particular geographic locations with particular marketing content and/or businesses. *See* Ex. 1004 ¶¶ 28, 36, 42. Petitioner argues that “the geolocation of interest is registered with Verizon’s system, whether referring to display 114 or a business location, to facilitate Verizon’s tailored-content distribution,” which constitutes the recited “registering a first geolocation associated with . . . a physical asset” and “a virtual asset.” Pet. 8 (citing Ex. 1004 ¶¶ 36, 42, 46, Ex. 1002 ¶¶ 95–97).

Patent Owner argues that the cited portions of Felt (Verizon) do not “mention . . . registering assets” (Prelim. Resp. 21) and do not otherwise disclose the recited “registering” of “asset[s]” (*id.* at 21–23). However, Patent Owner does not explain why the techniques shown in the reference would fail to disclose the identified elements of claim 28, notwithstanding the use of different words in Felt (Verizon). Indeed, in the realm of patent claim drafting, “[t]hings are not made for the sake of words, but words for things.” *Festo Corp. v. Shoketsu Kinzoku Kogyo Kabushiki Co.*, 535 U.S. 722, 731 (2002) (quoting *Autogiro Co. v. United States*, 384 F. 2d 391, 397 (Ct. Cl. 1967)).

Petitioner argues that paragraphs 28, 34–36, 42, and 46 of Felt (Verizon) disclose claim element 28(b): “receiving media content to be associated with at least one registered asset.” Pet. 8–9. For example, Petitioner (Pet. 7) refers to the reference’s disclosure of “[a]d agencies 104, 106” that “may provide marketing content to ad server 107,” wherein:

⁹ Our discussion employs the claim element enumeration provided in Petitioner’s Appendix of Claims. *See* Pet. x–xi.

The marketing content may be categorized or assigned criteria based on . . . business(es) associated with the marketing content . . . further categorized or assigned criteria based on preferred location of display . . . proximity to known geographical locations of, for example, businesses, parks, institutions, or proximity to other mobile units 124, mobile devices 120, or even displays 114.

Ex. 1004 ¶ 28.

In arguing that Felt (Verizon) fails to disclose element 28(b), Patent Owner relies on the reference’s purported lack of the “registering” features — addressed above, in regard to element 28(a). *See* Prelim. Resp. 23 (“The Petition makes no effort to identify what the associated registered asset in Verizon is or could be; rather, it is improperly left up to the Board and Patent Owner to identify.”) As discussed above, however, Felt (Verizon) teaches a database that correlates geographic locations with particular marketing content and/or businesses. *See* Ex. 1004 ¶¶ 28, 36, 42.

Petitioner argues that paragraphs 28, 40, 41, 48–50, and 53 of Felt (Verizon) teach claim 28’s limitations reciting:

[28(c)] specifying a plurality of rules for delivering the media content, wherein specifying the plurality of rules comprises specifying:

[28(c)(i)] a first delivery rule associated with at least one element of profile data corresponding with a recipient of the media content, and

[28(c)(ii)] a second delivery rule associated with a second geolocation at which the recipient is tracked.

Pet. 9–10. However, the Petitioner’s cited portions of Felt (Verizon) (¶¶ 42–43) that purportedly teach element 28(c)(ii) (the “second delivery rule associated with a second geolocation at which the recipient is tracked”), relate to “mobile unit[s] 124” — vehicles that display marketing content

relating to respective locations. *Id.* at 10. This position appears to be inconsistent with Petitioner’s mapping of the “at least one element of profile data corresponding with a recipient of the media content,” recited in element 28(c)(i), to Felt (Verizon)’s disclosure of user profile data. *See id.* at 9 (citing Ex. 1004 ¶¶ 40, 41, 48–50, 53). Petitioner does not identify any disclosure, in Felt (Verizon), indicating that a mobile unit 124 has a user profile. Accordingly, at the present stage of this proceeding, Patent Owner’s argument that Petitioner has not sufficiently shown that a “mobile unit 124” maps to the claimed “recipient of the media content” having corresponding “profile data,” per claim 28, appears to have merit. *See Prelim. Resp.* 25 (“There is nothing in Verizon describing a second rule being employed at a second delivery location.”)

Petitioner argues that paragraphs 23, 36, 40–43, and 47–50 and Figure 4 of Felt (Verizon) teach element 28(d): “receiving an indication that the recipient is proximate to the first geolocation, comparing the first delivery rule and the at least one element of profile data associated with the recipient.” *Pet.* 10–11.

Patent Owner argues that Petitioner’s argument, regarding element 28(d), “mixes embodiments of” Felt (Verizon) and “makes general statements” about the reference’s teachings, “with no text directly recited in Verizon or the ’620 patent.” *Prelim. Resp.* 25–26.

It does not appear, at the present stage of the proceeding, that Patent Owner identifies a deficiency in Petitioner’s argument for element 28(d). Petitioner’s citations to Felt (Verizon) appear to show a “decision module” that, in addition to location or proximity data, “may take into account user

profiles and/or user settings before distributing marketing content to various mobile devices 120.” Ex. 1004 ¶ 40.

Petitioner argues that paragraphs 40–42, 47, 50, 53, and 69 of Felt (Verizon) teach element 28(e) of the ’620 patent: “tracking a location associated with the recipient in response to a matching comparison.” Pet. 11–12.

Patent Owner argues that Petitioner’s argument for element 28(e) “rel[ies] solely on generalities and unexplained string cites.” Prelim. Resp. 26.

Yet, Patent Owner does not address Petitioner’s argument (Pet. 11) that element 28(e) would be satisfied by Felt (Verizon)’s disclosure of “user settings,” “includ[ing] a ‘do not track’ (or, alternatively, an ‘opt-in’) option that may be enabled by the user via an application in mobile device 120” that “would prevent (or allow) a location/proximity module from collecting and/or using data relating to location or proximity of mobile device 120.” Ex. 1004 ¶ 41.

Petitioner argues that paragraphs 36, 42, 43 of Felt (Verizon) teach element 28(f): “comparing the second delivery rule and the location in order to determine whether the recipient is proximate to the second geolocation.” Pet. 12–13.

Yet, as discussed above, regarding element 28(c)(ii), it appears, at the present stage of this proceeding, that Petitioner has not adequately shown that Felt (Verizon) teaches the recited “second delivery rule” involving whether the “recipient” is at the “second geolocation.”

Petitioner argues that paragraphs 40–43, 47, 50, 53 of Felt (Verizon) teach element 28(g): “delivering, upon fulfillment of the first delivery rule and the second delivery rule, the media content to the recipient.”

However, as discussed above, in regard to elements 28(c)(ii) and 28(f), at the present stage of this proceeding, Patent Owner’s argument, to the effect that Petitioner has not adequately shown that Felt (Verizon) teaches the recited “second delivery rule,” appears to have merit.

Petitioner’s argument that Felt (Verizon) anticipates independent claim 29 of the ’620 patent relies substantially upon Petitioner’s analysis of Felt (Verizon), regarding claim 28. *See* Pet. 16–18.

2. *Ground 2 (Obvious over Felt (Verizon), Kerr, and/or Geer)*

Petitioner contends that Felt (Verizon), Kerr, and/or Geer render obvious independent claims 28 and 29 of the ’620 patent. *See* Pet. 13–16.

Petitioner relies upon Kerr, to the extent that Felt (Verizon) lacks a sufficient disclosure of “registering asset data” (element 28(a)). *See* Pet. 13–15. Petitioner relies upon Geer, “[t]o the extent that Verizon lacks express or elaborate discussion of responsiveness in tracking above concerning Element 28(c).” *Id.* at 15. Thus, Patent Owner’s argument that Petitioner has not adequately shown that Felt (Verizon) teaches the recited “second delivery rule” is not resolved by Petitioner’s contentions based on the teachings of Kerr or Geer.

In addition to relying on the arguments presented for Ground 1 — to the effect that Felt (Verizon) fails to teach various limitations of claims 28 and 29 of the ’620 patent (*see* Prelim. Resp. 30–31) — Patent Owner argues that Petitioner fails to provide an adequate reason to combine the teachings

of Felt (Verizon) and Kerr (*id.* at 29–30), and that Petitioner fails to provide a reason to combine the teachings of Felt (Verizon) and Geer (*id.* at 31–33).

With respect to the combination of Felt (Verizon) and Kerr, Patent Owner first argues that “no explicit reason is given for why a POSITA would need or want to look to Kerr to modify Verizon to arrive at the claimed invention.” Prelim. Resp. 29–30.

Patent Owner’s first argument appears to be an assertion that Kerr constitutes non-analogous art. However, the argument does not address the requisite inquiries for determining non-analogousness. *See In re Bigio*, 381 F.3d 1320, 1325 (Fed. Cir. 2004).

Patent Owner also argues that the Petition relies upon an unexplained string citation to various paragraphs of Kerr, and other “vague[] assert[ions].” Prelim. Resp. 30.

However, Petitioner, with reference to the Goldberg Declaration (Ex. 1002), argues that a sufficient reason exists, for combining Felt (Verizon) with Kerr, because “Kerr’s interfacing allows registration of the assets, and provides ease and control in human-machine interfacing,” which would have supported the distribution of targeted content. Pet. 14–15 (citing Ex. 1005 ¶ 96, Ex. 1002 ¶¶ 107–109).

At the present stage of the proceeding, it appears that Petitioner has identified a sufficient reason to combine Felt (Verizon) with Kerr.

With respect to the combination of Felt (Verizon) and Geer, Patent Owner argues:

[T]he Petition did not address why Geer, a patent directed at social media, would be utilized by a POSITA to develop a personalized, location-based advertising campaign, nor is there any explanation as to whether the teachings of Geer could even be successfully combined with Verizon.

Prelim. Resp. 31. Similarly, Patent Owner goes on to argue that Petitioner cites Geer for teachings that would provide increased precision for location tracking, as well as features for conserving battery power, but Patent Owner points out that the Petition does not rely upon Geer for any limitations recited in the '620 patent. *Id.* at 31–33.

Patent Owner's argument does not appear to address the precise issue of whether there would have been a reason to combine the teachings of Felt (Verizon) and Geer. Nevertheless, we understand Patent Owner to dispute whether Geer's teachings teach or suggest any of the identified limitations of the claims of the '620 patent. Patent Owner's argument appears to have merit, as the features for which Petitioner cites Geer — “responsiveness” and “increased precision” in tracking (*see* Pet. 15) — are not recited in the claims.

3. *Ground 3 (Obvious over Felt (Verizon) and Thaper (Cellco))*

Petitioner contends that Felt (Verizon) and Thaper (Cellco) render obvious independent claim 1 and dependent claims 11–27 of the '620 patent. *See* Pet. 18–35. The Petition cites to Thaper (Cellco), only in regard to claims 3 and 4 of the '620 patent. *See id.* 26, 27.

Independent claim 1 of the '620 patent, in a manner similar to independent claims 28 and 29, recites “a second rule for updating the media content, the second rule being associated with a second geolocation” (element 1(c)(ii)), “tracking a location associated with the consumer” (element 1(g)), and “comparing the second rule and the location in order to determine whether to update the media content” (element 1(h)). *See* Ex. 1001, 38:1–3, 38:17–20. As in Petitioner's analysis of the similar limitation of claim 28 (*see* Pet. 10), Petitioner again relies upon Felt

(Verizon)’s disclosure of location tracking for mobile units 124 — vehicles that display advertising content. *See id.* at 23–25 (citing Ex. 1004 ¶¶ 36, 42, 43, 47). In a manner similar to our discussion, above (regarding Ground 1), Petitioner’s mapping of the “consumer” to Felt (Verizon)’s mobile units 124 appears to conflict with the requirement of claim 1 of “profile data corresponding with the consumer” (element 1(c)(i)), because the Petition does not appear to identify any disclosure of Felt (Verizon)’s mobile units 124 corresponding to “profile data corresponding with the consumer.”

Patent Owner does not address whether the cited references teach or suggest the claim limitations at issue in Ground 3. Patent Owner argues only that Petitioner does not provide a reason to combine the teachings of Felt (Verizon) with Thaper (Cellco). *See Prelim. Resp.* 38–39.

The Petition refers to Thaper (Cellco) only with regard to the analysis of claims 3 and 4 of the ’620 patent, which state:

3. The method of claim 2, further comprising:
tracking the mobile asset, and
updating a database with an up-to-date location data associated with the location tracking technology.
4. The method of claim 3, wherein tracking the mobile asset comprises accessing tile database with the up-to-date location data and retrieving the up-to-date location data.

Ex. 1001, 38:26–32.

The Petition states that Felt (Verizon) “incorporat[es] U.S. 8,391,886, Ex. 1010)” (i.e., Thaper (Cellco)). Pet. 26. In addition, the Petition states:

To the extent that Verizon does not expressly or elaborately discuss database storage/retrieval within its location-tracking communications, POSITA would have implemented location data updating and tracking with a database, as recited in claims 3 and 4, based on Verizon’s suggestion for database storage

(including via Cellco), to facilitate use of location data and/or for analysis of historical locations in providing tailored content.

Id. at 26–27 (citing Ex. 1002 ¶¶ 140–141, Ex. 1004 ¶ 50).

Patent Owner states that Thaper (Cellco)’s technique for providing location information of a mobile device to software applications on the device is “network-intensive . . . i.e., requiring cellular towers, for locating a mobile device.” *Id.* at 38 (citing Ex. 1010, Abstr.). Patent Owner further argues:

In the Petition, the only possible explanation given for combining Verizon with Cellco is that “Verizon’s suggestion for database storage (including via Cellco)” could “facilitate use of location data and/or for analysis of historical locations in providing tailored content.” Pet., 26–27. But Verizon uses geofencing. A POSITA would not be motivated to look to Cellco’s network-intensive approach to improve Verizon. Further, Cellco’s use of a database of location history for determining geographic notification is not required in Verizon.

Prelim. Resp. 39.

Insofar as Patent Owner might be contending that Thaper (Cellco) constitutes non-analogous art — i.e., per the assertion: “A POSITA would not be motivated to look to Cellco’s network-intensive approach to improve Verizon” (Prelim. Resp 39) — the relevant factors are not analyzed. *See Bigio*, 381 F.3d at 1325. Further — and notwithstanding Patent Owner’s contention that “Cellco’s use of a database of location history for determining geographic notification is not required in Verizon” (*id.*) — it is not clear why Petitioner’s asserted reason for combining the references’ teachings (identified above) would be insufficient.

In any event, Petitioner’s reliance upon Thaper (Cellco) (*see* Pet. 26–27), regarding dependent claims 3 and 4, does not appear, at the present

stage of the proceeding, to overcome the shortcomings of Felt (Verizon) raised by Patent Owner and addressed herein, regarding base claim 1.

4. *Ground 4 (Obvious over Felt (Verizon) and Muhire)*

Petitioner contends that Felt (Verizon) and Muhire render obvious independent claim 1 and dependent claims 11–27 of the '620 patent. *See* Pet. 35–36.

Patent Owner's argument, to the effect that Petitioner has not adequately shown that Felt (Verizon) teaches the recited "second delivery rule," is not resolved by Petitioner's contentions based on the teachings of Muhire discussed above (regarding Ground 3), as to claims 1 and 11–27 of the '620 patent. *See* Pet. 35–36.

Patent Owner does not address whether the cited references teach or suggest the claim limitations at issue in Ground 4. Patent Owner argues only that Muhire is non-analogous art, and that Petitioner does not provide a reason to combine the teachings of Felt (Verizon) with Muhire. Prelim. Resp. 33–34.

As to the issue of whether Muhire constitutes non-analogous art, Patent Owner identifies the proper inquiries, either of which would establish a reference as analogous art: (1) whether the reference is from the same field of endeavor as the claimed invention; and (2) whether the reference is reasonably pertinent to the problem faced by the inventor. Prelim. Resp. 33–34 (citing *Bigio*, 381 F.3d at 1325). However, Patent Owner does not analyze either inquiry, but merely states: "The Petition provides no evidence why a POSITA would look to making such a combination with the location tracking of Verizon; rather only a discussion of using separate layers is provided." *Id.* at 34 (citing Pet. 35, Ex. 1002 ¶ 163).

By contrast, Dr. Goldberg regards Muhire as being “focused in [sic] similar sector of technology” as the ’620 patent. Ex. 1002 ¶ 163. Further, Muhire addresses the delivery of customized advertising media content to online electronic devices (*see* Muhire ¶¶ 32–46) — a subject that could be regarded as the field of endeavor of the ’620 patent, which “relates to an online platform . . . for managing and/or delivering location and time based advertisements” (Ex. 1001, 1:20–24).

Therefore, at this stage of the proceeding, we are not persuaded on the current record that Muhire constitutes non-analogous art.

Patent Owner also argues that the Petition provides “no discussion of why or how the teachings of Muhire’s layers could be successfully combined with the teachings of Verizon.” Prelim. Resp. 34. Patent Owner acknowledges that Dr. Goldberg addresses how a person of ordinary skill in the art might have combined the teachings of Felt (Verizon) with Muhire, but Patent Owner criticizes this as being merely a “general statement.” *Id.* (citing Ex. 1002 ¶ 164).

Dr. Goldberg addresses Muhire’s purported “benefits of segmenting, organizing, sequencing, and/or indexing, affording ease in development, debugging, implementation, and/or updating to Verizon’s tailored content provisions.” Ex. 1002 ¶ 164. This does not appear to be an insufficient “general statement,” as Patent Owner contends. *See* Prelim. Resp. 34.

In view of the foregoing, and at the present stage of the proceeding, we do not regard the Petition as lacking a reason to combine the teachings of Felt (Verizon) with Muhire.

5. *Ground 5 (Obvious over Felt (Verizon), Muhire, and Kerr)*

Petitioner contends that Felt (Verizon), Muhire, and Kerr render obvious independent claim 1 and dependent claims 11–27 of the '620 patent. *See* Pet. 37–38.

Patent Owner's argument, to the effect that Petitioner has not adequately shown that Felt (Verizon) teaches the recited "second delivery rule," is not resolved by Petitioner's contentions based on the teachings of Muhire and Kerr as discussed above (regarding Ground 3), as to claims 1 and 11–27 of the '620 patent. *See* Pet. 37–38.

Patent Owner does not address whether the cited references teach or suggest the claim limitations at issue in Ground 5. Patent Owner argues only that Petitioner does not provide a reason to combine the teachings of Felt (Verizon) and Kerr (referring to the arguments stated for Ground 2), or to combine the teachings of Felt (Verizon) and Muhire (referring to the arguments stated for Ground 4). Prelim. Resp. 34–35.

For the reasons provided above, regarding Grounds 2 and 4, and in view of the present stage of the proceeding, we do not presently regard the Petition as lacking sufficient reasons for combining Felt (Verizon) with Kerr and Muhire.

6. *Ground 6 (Obvious over Felt (Verizon), Kerr (or Kerr and Muhire), and Sehn)*

Petitioner contends that Felt (Verizon), Kerr (or Kerr and Muhire), and Sehn render obvious dependent claims 7–10 of the '620 patent. *See* Pet. 38–40.

Patent Owner's argument, to the effect that Petitioner has not adequately shown that Felt (Verizon) teaches the recited "second delivery

rule,” is not resolved by Petitioner’s contentions based on the teachings of Kerr, Muhire, and Sehn discussed above (regarding Ground 3), as to independent claim 1 of the ’620 patent and, therefore, dependent claims 7–10, as well. *See* Pet. 38–40.

Patent Owner does not address whether the cited references teach or suggest the claim limitations at issue in Ground 6. Patent Owner argues only that Petitioner does not provide a reason to combine the teachings of Felt (Verizon) with Kerr (referring to Patent Owner’s arguments for Ground 2), or to combine Sehn with Felt (Verizon) or Kerr, or to combine Felt (Verizon) with Muhire (referring to the arguments stated for Ground 4). *See* Prelim. Resp. 34–35.

For the reasons provided above, regarding Grounds 2 and 4, and in view of the present stage of the proceeding, we do not presently regard the Petition as lacking sufficient reasons for combining Felt (Verizon) with Kerr and Muhire.

As to combining Sehn with Felt (Verizon) or Kerr, Patent Owner argues:

Sehn (Exh. 1008) has nothing to do with advertising, let alone digital advertising. Instead, it describes a digital “event gallery” in which devices located in a geolocation fence can send messages, like pictures, to the gallery. The extreme dissimilarity between it and the ’620 patent — and between Sehn and Verizon or Kerr — begs for a thorough explanation of why a POSITA would combine Verizon or Kerr with Sehn for any purpose, let alone to achieve the patented invention of the ’620 patent. Yet the Petition offers no answers, except a terse clause that “Shen’s [sic] teaching for recognizing business names and logos” could somehow help create “tailored content.” *See* Pet., 40.

Prelim. Resp. 35.

Insofar as Patent Owner is arguing that Sehn should be regarded as non-analogous art (e.g., Patent Owner’s assertion of “extreme dissimilarity” between Sehn and the ’620 patent), Patent Owner has not analyzed the inquiries of (1) whether the reference is from the same field of endeavor as the claimed invention and (2) whether the reference is reasonably pertinent to the problem faced by the inventor. *See Bigio*, 381 F.3d at 1325.

Further, Patent Owner does not analyze the Petition’s statement that Sehn brings, to the combination of reference teachings, “benefits in administrative level control and access . . . in consideration of additional identifiers,” which is supported by Dr. Goldberg’s Declaration. *See* Pet. 40 (citing Ex. 1008, 5:33–49, Ex. 1002 ¶¶ 169–173).

Therefore, at the present stage of the proceeding, we do not regard Sehn as non-analogous art, or as lacking a reason for combination with the other cited references.

7. *Ground 7 (Obvious over Adharapurapu (Alcatel) and Kerr*

Petitioner contends that Adharapurapu (Alcatel) and Kerr render obvious independent claim 1 and dependent claims 11–27 of the ’620 patent. *See* Pet. 40–56. For the reasons provided, below, we determine that Petitioner has sufficiently shown that the cited references teach or suggest the limitations of claims 1 and 11–27.

Patent Owner does not address whether the cited references teach or suggest the claim limitations at issue in Ground 7; Patent Owner addresses only the sufficiency of a reason to combine the teachings of Adharapurapu (Alcatel) with those of Kerr. *See* Prelim. Resp. 36. Patent Owner argues:

The only motivation to combine that the Patent Owner could discern in the Petition is “[t]o the extent that Alcatel does

not elaborately discuss particular features such as profile data, a POSITA would have implemented these features based on Alcatel's suggestions, Kerr's disclosure, and/or POSITA's skill and/or knowledge." Pet. 41 (citing Exh. 1002, ¶175).

Id. Patent Owner contends that the above-identified statement in the Petition fails to articulate a proper reason to combine the references, instead providing "merely a statement that it may be possible to combine the references, supported by nothing more than a verbatim recitation of the same by Petitioner's expert." *Id.* (citing *Axonics, Inc. v. Medtronic, Inc.*, 73 F.4th 950, 957 (Fed. Cir. 2023)).

Yet, Patent Owner does not address Petitioner's more extensive arguments that address proposed reasons to combine Adharapurapu (Alcatel) with Kerr, which are supported by various citations to Dr. Goldberg's Declaration. *See* Pet. 43–46, 50–51. In view of Petitioner's arguments, at the present stage of the proceeding, we determine Petitioner has sufficiently shown a reason supporting the combination of Adharapurapu (Alcatel) with Kerr.

Petitioner's arguments that Adharapurapu (Alcatel) and Kerr teach or suggest the identified claim limitations of Ground 7 (claims 11–27 of the '620 patent) (*see* Pet. 40–56) are not explicitly disputed by Patent Owner, at this stage of the proceeding. We determine that Petitioner's arguments are sufficiently supported, for the purposes of establishing a reasonable likelihood that it would prevail in showing unpatentability of claims 11–27 of the '620 patent, in Ground 7.

8. *Ground 8 (Obvious over Adharapurapu (Alcatel), Kerr, and Muhire)*

Petitioner contends that Adharapurapu (Alcatel), Kerr, and Muhire render obvious independent claim 1 and dependent claims 11–27 of the ’620 patent. *See* Pet. 57–58.

In addition to the arguments presented for Ground 7, the Petition (regarding Ground 8) cites Muhire for an alternative teaching of the claimed “layers” — e.g., claim 1’s “content interaction layer” and “consumer tracking layer.” *See* Pet. 57–58 (citing Ex. 1007 ¶¶ 50, 52–57, Ex. 1002 ¶¶ 210–213).

Patent Owner does not address whether the cited references teach or suggest the limitations of claims 1 and 11–27. Patent Owner’s only argument for Ground 8 is the assertion that there is no reason to combine the Adharapurapu (Alcatel) and Kerr references (relying on Patent Owner’s argument for Ground 7). *See* Prelim. Resp. 36.

For the reasons provided above, regarding Ground 7, Petitioner establishes an adequate basis for combining the references cited, in Ground 8.

In view of Petitioner’s arguments for Ground 7, together with the additional arguments for the alternative teachings of Muhire (regarding Ground 8), we determine that Petitioner has established a reasonable likelihood that it would prevail in showing unpatentability of independent claim 1 and dependent claims 11–27 of the ’620 patent, under Ground 8.

9. *Ground 9 (Obvious over Adharapurapu (Alcatel), Kerr, and Felt (Verizon))*

Petitioner contends that Adharapurapu (Alcatel), Kerr, and Felt (Verizon) render obvious independent claim 1 and dependent claims 2–6, and 22–27 of the ’620 patent. *See* Pet. 58–59.

In addition to the arguments presented for Ground 7, the Petition (regarding Ground 9) relies upon Felt (Verizon) for teaching the “mobile asset” of claim 2 (along with claims 3–6 depending therefrom), and the types of “interactivity criteria” recited in claim 24 — “a change in a physical location associated with the consumer” or “a particular destination to which the consumer must navigate.” Pet. 58–59 (citing Ex. 1004 ¶¶ 28, 53, Ex. 1002 ¶¶ 214–216).

Patent Owner does not address whether the cited references teach or suggest the limitations of the claims at issue in Ground 9. Patent Owner’s only arguments for Ground 9 are the assertions that there is no reason to combine Felt (Verizon) with Kerr (relying on Patent Owner’s argument for Ground 2) and there is no reason to combine Adharapurapu (Alcatel) with Kerr (relying on Patent Owner’s argument for Ground 8, which, in turn, relies upon arguments provided for Ground 7). *See* Prelim. Resp. 37.

For the reasons provided above, regarding Patent Owner’s arguments concerning reasons to combine references in Ground 2 and Ground 7, Petitioner establishes an adequate basis for combining the references cited, in Ground 9.

In view of Petitioner’s arguments, we determine that Petitioner has established a reasonable likelihood that it would prevail in showing unpatentability of independent claim 1 and dependent claims 2–6 and 22–27 of the ’620 Patent, under Ground 9.

10. Ground 10 (Obvious over Adharapurapu (Alcatel), Kerr, Muhire, and Felt (Verizon))

Petitioner contends that Adharapurapu (Alcatel), Kerr, Muhire, and Felt (Verizon) render obvious independent claim 1 and dependent claims 2–6 and 22–27 of the ’620 patent. *See* Pet. 58–59.

In addition to the arguments presented for Ground 7 and Ground 9, the Petition (regarding Ground 10), the Petition relies upon Muhire’s alternative teaching of the claimed “layers,” as discussed above in Ground 8. *See* Pet. 58–59.

Patent Owner does not address whether the cited references teach or suggest the limitations of the claims at issue in Ground 10. Patent Owner’s only argument for Ground 10 is the assertion that there is no reason to combine Felt (Verizon) with Kerr (relying on Patent Owner’s argument for Ground 2) and there is no reason to combine Adharapurapu (Alcatel) with Kerr (relying on Patent Owner’s argument for Ground 8, which, in turn, relies upon arguments provided for Ground 7). *See* Prelim. Resp. 37.

For the reasons provided above, regarding Patent Owner’s arguments concerning reasons to combine references in Ground 2 and Ground 7, Petitioner establishes an adequate basis for combining the references cited, in Ground 10.

In view of Petitioner’s arguments, we determine that Petitioner has established a reasonable likelihood that it would prevail in showing unpatentability of independent claim 1 and dependent claims 2–6 and 22–27 of the ’620 Patent, under Ground 10.

11. Ground 11 (Obvious over Adharapurapu (Alcatel), Kerr, Muhire, Felt (Verizon), and Sehn)

Petitioner contends that Adharapurapu (Alcatel), Kerr, Muhire, Felt (Verizon), and Sehn render obvious dependent claims 7–10 of the ’620 patent. *See* Pet. 59–60.

In addition to Petitioner’s arguments for Ground 7, the Petition (in Ground 11) relies upon Muhire’s alternative teaching of the claimed “layers” in claim 1 (from which claims 7–10 depend), as discussed above in Ground 8. *See* Pet. 59. Further, the Petition relies upon Kerr for the disclosure of “registering a brand asset . . . comprised of a digitization of . . . a trade name,” as recited in claim 7 (and in claims 8–10 depending therefrom). *See id.* (citing Ex. 1005 ¶ 97, Figs. 2, 8, 31–33). Further, the Petition relies upon Kerr and Sehn for the disclosure of “processing the multimedia content to ascertain an object within the multimedia content that corresponds to the brand asset,” as recited in claim 8 (and in claims 9 and 10 depending therefrom). *See id.* at 59–60 (citing Ex. 1005 ¶¶ 136–138, Ex. 1008, 5:55–49).

Patent Owner does not address whether the cited references teach or suggest the limitations of the claims at issue in Ground 11. Patent Owner’s only argument for Ground 11 is the assertion that there is no reason to combine Felt (Verizon) with Kerr. *See* Prelim. Resp. 37 (relying on Patent Owner’s argument for Ground 2).

For the reasons provided above, regarding Patent Owner’s arguments concerning reasons to combine references in Ground 2, Petitioner establishes an adequate basis for combining the references cited, in Ground 11.

In view of Petitioner’s arguments, we determine that Petitioner has established a reasonable likelihood that it would prevail in showing

unpatentability of dependent claims 7–10 of the ’620 Patent, under Ground 11.

12. Ground 12 (Anticipation by Adharapurapu (Alcatel))

Petitioner contends that Adharapurapu (Alcatel) anticipates independent claims 28 and 29 of the ’620 patent. *See* Pet. 60–64.

Patent Owner disagrees. *See* Prelim. Resp. 39–44.

Petitioner contends that paragraphs 2, 4, 7, 15–22, and Figure 3 of Adharapurapu (Alcatel) teach the following limitations of claim 28:

[28(a)] registering asset data, wherein registering the asset data comprises at least one of the following:

[28(a)(i)] registering a first geolocation associated with one of the following:

[28(a)(i)(1)] a physical asset, and

[28(a)(i)(2)] a virtual asset.

See Pet. 61.¹⁰

In disputing Petitioner’s position, Patent Owner argues that Adharapurapu (Alcatel) uses the word “register” only in paragraph 18, and that the reference concerns delivery of content to mobile devices, based upon the direction of movement of the mobile devices. Prelim. Resp. 40–41. By contrast, the ’620 patent delivers content, “based upon location . . . not direction.” *Id.* at 41.

Yet, it appears that — as part of delivering content, based upon direction of movement of a mobile device — Adharapurapu (Alcatel) employs correlations established between particular geolocations and

¹⁰ Our discussion employs the claim element enumeration provided in Petitioner’s Appendix of Claims. *See* Pet. x–xi.

particular related physical assets, such as restaurants — i.e., the subject matter that Petitioner identifies as “registering” “geolocation[s]” associated with “physical asset[s]” (Pet. 61). *See* Ex. 1009 ¶¶ 15–20, Fig. 3.

Petitioner contends that paragraphs 2, 16, 17, and 20–22 of Adharapurapu (Alcatel) teach element 28(b): “receiving media content to be associated with at least one registered asset.” Pet. 61.

Patent Owner does not address the substance of Petitioner’s position on element 28(b). *See* Prelim. Resp. 41.

Nevertheless, Petitioner’s cited portions of Adharapurapu (Alcatel) appear to disclose element 28(b). For example, Adharapurapu (Alcatel) discloses a mobile service provider’s distribution of content from content publishers, based upon the “location of different tracker base stations” that are proximate particular geographic locations. *See* Ex. 1009 ¶¶ 17, 20–22.

Petitioner contends that paragraphs 15, 17, 18, and 20–22 of Adharapurapu (Alcatel) teach the following limitations of claim 28:

[28(c)] specifying a plurality of rules for delivering the media content, wherein specifying the plurality of rules comprises specifying:

[28(c)(i)] a first delivery rule associated with at least one element of profile data corresponding with a recipient of the media content, and

[28(c)(ii)] a second delivery rule associated with a second geolocation at which the recipient is tracked.

See Pet. 61–62.

Indeed, it appears that the rules processor 204 of Adharapurapu (Alcatel) discloses both a rule based upon “profile data” of a “recipient” (e.g., a subscription for particular types of content delivery), as well as a rule “associated with a second geolocation at which the recipient is tracked”

(e.g., the presence of mobile device in the vicinity of a particular geographic location). *See* Ex. 1009 ¶¶ 15, 17, 18.

In disputing Petitioner’s position, as to these elements of claim 28, Patent Owner argues that paragraph 17 of the reference fails to show the recited “second delivery rule associated with a second geolocation at which the recipient is tracked.” Prelim. Resp. 42. Instead, Patent Owner argues, paragraph 17 discloses a “rule . . . based upon the location of the tracker base station,” whereby media content “is sent to all the mobile devices that are in the vicinity” — but, in paragraph 17, “[i]t is not the ‘recipient’ that is being tracked, as required by this element of claim 28.” *Id.* Further, Patent Owner disputes the sufficiency of the disclosure of paragraph 18 of Adharapurapu (Alcatel). *Id.* at 42–43. Specifically, Patent Owner points out that paragraph 18 of the references states that “[a] path illustrating the location and direction of the movement of a subscribed mobile device 107 user ***can be inferred***” based upon “the location of tracker base stations stored in the mobility history.” *Id.* (quoting Ex. 1009 ¶ 18). Patent Owner argues: “Inferring a location of a user is not the same as tracking a user.” *Id.* at 43.

On the current record, however, we are not persuaded by Patent Owner’s interpretation of the teachings of Adharapurapu (Alcatel). As to paragraph 17 of the reference, the disclosed techniques do appear to “track[]” the location of a “recipient,” because paragraph 17 states that particular content “will be sent to all the mobile devices that are in the vicinity of the road.” Ex. 1009 ¶ 17. Hence, the location of a “recipient” (i.e., a mobile device) is “tracked,” in order to determine that it is in the vicinity of the road. *See id.* As to paragraph 18 of the reference, it appears

that what is “inferred” is not the location of mobile device user, as Patent Owner contends. *See* Prelim. Resp. 42–43. Rather, a “*path* illustrating the location and direction of the movement of” a mobile device user “can be inferred,” based upon the history of prior movements. Ex. 1009 ¶ 18 (emphasis added). By contrast, Adharapurapu (Alcatel) appears to “track[]” the location of a “recipient” (e.g., a mobile device), per element 28(c)(ii). *See id.* (“Information about the movement of the mobile device 107 is tracked by the tracker base stations 105. As the mobile device 107 keeps moving from one location to another, tracker base stations in every location register the mobile device.”)

Petitioner contends that paragraphs 15, 17, 18, and 20–22 of Adharapurapu (Alcatel) teach claim element 28(d) of the ’620 patent: “receiving an indication that the recipient is proximate to the first geolocation, comparing the first delivery rule and the at least one element of profile data associated with the recipient.” Pet. 62–63.

It appears that Adharapurapu (Alcatel) satisfies element 28(d), at least by checking the subscription status of a mobile device, based upon proximity to a geographic location. *See* Ex. 1009 ¶ 22 (“When a mobile device 107 is detected (401) by a tracker base station 105, the tracker base station 105 checks (402) if the mobile device user has subscribed to content delivery based on direction of mobility service.”) Similarly, Petitioner cites to the reference’s example of sending a message about a road closure to subscribers in the vicinity of the road. Pet. 62 (citing Ex. 1009 ¶¶ 17, 18, 20).

Patent Owner disputes the sufficiency of Adharapurapu (Alcatel)’s road-closure example for teaching element 28(d). *See* Prelim. Resp. 43.

Patent Owner argues that the reference “does not determine proximity to a closed road; it only knows the location of tracker base stations”; further, Patent Owner argues that “[t]he base station sends out the message to the mobile devices it is in contact with (not based on a geofenced location).” *Id.* (citing Ex. 1009 ¶¶ 17, 18).

Yet, contrary to Patent Owner’s remark that Adharapurapu (Alcatel)’s technique “does not determine proximity to a closed road” and does not “send[] out the message to the mobile devices” “based on a geofenced location” (Prelim. Resp. 43), the reference discloses that “[i]nformation about the movement of the mobile device 107 is tracked by the tracker base stations 105” (Ex. 1009 ¶ 18) and “[t]he mobile service provider . . . configures a set of rules based on . . . the location of the tracker base stations near the road” (*id.* ¶ 17).

Petitioner contends that paragraphs 15, 20, and 22 of Adharapurapu (Alcatel) teach the following limitations of claim 28:

[28(e)] tracking a location associated with the recipient in response to a matching comparison;

[28(f)] comparing the second delivery rule and the location in order to determine whether the recipient is proximate to the second geolocation; and

[28(g)] delivering, upon fulfillment of the first delivery rule and the second delivery rule, the media content to the recipient.

See Pet. 63.

Patent Owner does not address the sufficiency of the reference’s teachings, in regard to elements 28(e)–(f), stating: “because of Petitioner’s repeated string cites and lack of identification as to specifically where and

how limitations are taught by Alcatel, Patent Owner will not address the remaining limitations.” Prelim. Resp. 43.

In any event, Adharapurapu (Alcatel) appears to teach 28(e)–(f). *See* Ex. 1009 ¶ 15 (“The mobile service provider network 103 has a mobility manager 104 which keeps track of location and direction of all the mobile devices 107 through base stations, where the subscriber has enabled the content delivery based on direction of mobility service.”)

As to independent claim 29 of the ’620 patent, Petitioner refers to the mapping of Adharapurapu (Alcatel) to substantially identical limitations of claim 28, and further addresses the mapping of the reference to specific differences in the language of claim 29. *See* Pet. 63–64. In addition, element 29(e) lacks a feature that appears in the corresponding element 28(d) (“comparing the first delivery rule and the at least one element of profile data associated with the recipient”). *See id.* at 64.

Like claim 28, claim 29 recites “specifying a plurality of rules for delivering the media content.” However, unlike claim 28, element 29(c)(i) recites “a first delivery rule associated with a *period of time*” and element 29(c)(i) recites “a second delivery rule associated with a second geolocation at which a recipient is tracked *during the period of time*.” Ex. 1001, 40:47, 40:49–51 (emphases added). Petitioner points out that Adharapurapu (Alcatel) discloses the use of particular time period restrictions for the dissemination of certain content to mobile devices. Pet. 64 (citing Ex. 1009 ¶¶ 17, 20).

In addressing Petitioner’s analysis of claim 29, in Ground 12, Patent Owner refers the comments provided for some of the corresponding claim elements of claim 28. *See* Prelim. Resp. 44 (concerning the preamble,

elements 29(a)–29(a)(i)(2), and element 29(b)). Otherwise, Patent Owner states that “because of Petitioner’s repeated string cites and lack of identification as to specifically where and how limitations are taught by Alcatel, Patent Owner will not address the remaining limitations.” *Id.*

We do not regard Petitioner’s arguments for either claim 28 or claim 29, in Ground 12, to be insufficient for a lack of specificity.

In view of Petitioner’s arguments, we determine that Petitioner has established a reasonable likelihood that it would prevail in showing unpatentability of independent claims 28 and 29 of the ’620 patent, under Ground 12.

13. Ground 13 (Obvious over Adharapurapu (Alcatel), Kerr and/or Geer)

Petitioner contends that Adharapurapu (Alcatel), together with Kerr and/or Geer, render obvious independent claims 28 and 29 of the ’620 patent. *See* Pet. 65–68.

The Petition relies upon Kerr “[t]o the extent that Alcatel lacks express or elaborate discussion of ‘registering’ its asset data” with regard to elements 28(a) and 29(a). *See* Pet. 65–66 (citing Ex. 1005, Abstr., ¶¶ 64–68, 80, 84, 87, 89, 91, 92, 96, 97, 120, 121, 125, 128, 133–164, 168–172, 177–183, Figs. 3–10, 13–15, 19–25, 30–35, Ex. 1002 ¶ 234¹¹).

The Petition relies upon Geer “[t]o the extent that Alcatel lacks express or elaborate discussion of responsiveness in tracking” in elements

¹¹ The Petition also cites “¶ 1036” of the Goldberg Declaration (Ex. 1002). *See* Pet. 66. This appears to be a typographical error, because the cited paragraph does not appear in the Declaration.

28(c) and 29(c). *See* Pet. 67–68 (citing Ex. 1006, Abstr., ¶¶ 57, 63–65, 74–76, 79, Ex. 1002 ¶¶ 235–237).

Patent Owner does not address whether the cited references teach or suggest the limitations of the claims at issue in Ground 13. Patent Owner’s only arguments for Ground 13 are the assertions that there is no reason to combine Adharapurapu (Alcatel) and Kerr (relying on Patent Owner’s arguments for Grounds 2 and 7), and there is no reason to combine Adharapurapu (Alcatel) and Geer (more accurately, that Geer is non-analogous art). *See* Prelim. Resp. 38.

As discussed, above (regarding Grounds 2 and 7), Petitioner establishes an adequate basis for combining the references cited, in Ground 13.

With regard to Petitioner’s alternative combination of Adharapurapu (Alcatel) and Geer, the issue raised by Patent Owner (in regard to Ground 2) (*see* Prelim. Resp. 32–33) applies to Ground 13, as well. Specifically — although Patent Owner does not squarely address the sufficiency of a reason to combine Adharapurapu (Alcatel) and Geer — it is unclear how Geer relates to the limitations of claims 28 and 29.

Further, it is not clear what issue Patent Owner addresses in § IX(I)(1)(r) of the Preliminary Response. *See* Prelim. Resp. 38.

Notwithstanding what appears to be the problematic alternative role of Geer, we are persuaded, at this stage of the proceeding, that Petitioner establishes a reasonable likelihood that it would prevail in showing unpatentability of independent claims 28 and 29 of the ’620 patent, under Ground 13.

V. CONCLUSION

After considering the evidence and arguments presented in the current record, we determine that Petitioner has demonstrated a reasonable likelihood that it would prevail with respect to at least one claim of the '620 patent challenged in the Petition. This standard is satisfied at least as to Grounds 7–13 of the Petition. Therefore, we institute *inter partes* review on all grounds presented in the Petition. *See SAS Inst. Inc. v. Iancu*, 138 S. Ct. 1348, 1352–53, 1359–60 (2018), 37 C.F.R. § 42.108(a) (“When instituting . . . review, the Board will authorize the review to proceed on all of the challenged claims and on all grounds of unpatentability asserted for each claim.”)

Further, we decline to exercise discretion under 35 U.S.C. § 314(a) to deny institution. Thus, we institute *inter partes* review.

We clarify, however, that the analysis, herein, is based only on the record as it stands now and should not be understood as a final determination regarding claim construction or patentability. Further, no party should rely on any preliminary finding or determination in this Decision or assume that the evidence cited in this Decision for any preliminary finding or determination will result in a similar finding or determination in the Final Written Decision after a complete record is developed.

VI. ORDER

Accordingly, it is

ORDERED that, pursuant to 35 U.S.C. § 314(a), an *inter partes* review of claims 1–29 of the '620 patent is hereby instituted on all the asserted grounds set forth in the Petition; and

FURTHER ORDERED, that pursuant to 35 U.S.C. § 314(c) and 37 C.F.R. § 42.4, notice is given of the institution of a trial, which commences on the entry date of this Decision.

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