

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

FOURSQUARE LABS, INC.,
Petitioner,

v.

BOARDACTIVE CORPORATION,
Patent Owner.

IPR2023-00919
Patent 10,692,108 B1

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

WOODS, *Administrative Patent Judge*.

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

ORDER
Denying Patent Owner's Motion to Exclude
Denying Petitioner's Motion to Exclude
37 C.F.R. § 42.64(c)

I. INTRODUCTION

Petitioner, Foursquare Labs, Inc., filed a Petition (Paper 1, “Pet.”) requesting *inter partes* review of claims 1–23 (“the Challenged Claims”) of U.S. Patent No. 10,692,108 B1 (Ex. 1001, “the ’108 patent”). *See* Pet. 1, 67. We issued a decision to institute an *inter partes* review of these claims. Paper 7 (“Institution Decision” or “Inst. Dec.”).

Patent Owner, BoardActive Corporation, filed a Patent Owner Response (Paper 10, “PO Resp.”), to which Petitioner filed a Reply (Paper 12, “Reply” or “Pet. Reply”), and to which Patent Owner filed a Sur-Reply (Paper 15, “Sur-Reply” or “PO Sur-Reply”).

In addition to the Petition, Petitioner filed a motion to exclude (Paper 19, “Pet. Mot.”), to which Patent Owner filed an opposition (Paper 22, “PO Opp.”).

Patent Owner also filed a motion to exclude (Paper 20, “PO Mot.”), to which Petitioner filed an opposition (Paper 21, “Pet. Opp.”).

Oral argument was held on September 4, 2024, and the transcript of the hearing was entered as Paper 28.

We have jurisdiction under 35 U.S.C. § 6. Petitioner bears the burden of proving unpatentability of the challenged claims, and the burden of persuasion never shifts to Patent Owner. *Dynamic Drinkware, LLC v. Nat’l Graphics, Inc.*, 800 F.3d 1375, 1378 (Fed. Cir. 2015). To prevail, Petitioner must prove unpatentability by a preponderance of the evidence. *See* 35 U.S.C. § 316(e); 37 C.F.R. § 42.1(d) (2019). This Final Written Decision is issued pursuant to 35 U.S.C. § 318(a) and 37 C.F.R. § 42.73. For the reasons that follow, we determine that Petitioner has shown by a preponderance of the evidence that claims 1–23 of the ’108 patent are

unpatentable.

A. Related Proceedings

The parties identify the following court proceeding relating to the '108 patent: *BoardActive Corporation v. Foursquare Labs, Inc.*, Case No. 1:22-cv-00597 (D. Del.) (the “Related Litigation”). Pet. 67; Paper 6, 3.

Patent Owner also identifies *inter partes* review IPR2023-00918 (challenging U.S. Patent No. 10,621,620 B2). Paper 6, 3.

B. Real Parties In Interest

Petitioner identifies itself, Foursquare Labs, Inc., as the real party-in-interest. Pet. 67. Patent Owner identifies itself, BoardActive Corporation, as the real party-in-interest. Paper 6, 3.

C. The '108 Patent (Ex. 1001)

The '108 patent is titled “Platform for Location and Time Based Advertising.” Ex. 1001, code (54). The '108 patent purports to describe “an online platform for managing geolocation and time-based advertising and methods for managing and/or delivering location and time[-]based advertisements.” *Id.* at 1:24–27. We reproduce Figure 2 of the '108 patent, below:

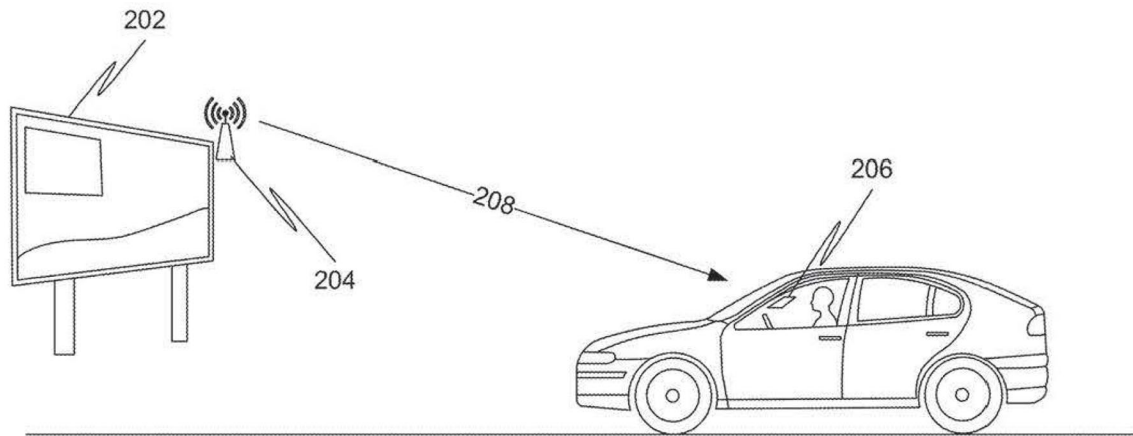


FIG. 2

Figure 2, reproduced above, “illustrates delivering advertisement content associated with traditional or digital signage to a mobile device of a user by communicating with a beacon.” Ex. 1001, 4:20–23. Specifically, Figure 2 depicts digital signage 202 installed at a first geolocation. *Id.* at 23:60–62. The location is not necessarily limited to an adjacent road, as shown, and may be located at a sporting event or airport, for example. *Id.* at 23:62–65. Further, digital signage 202 may include beacon 204 configured to transmit wireless signals 208 containing an advertisement. *Id.* at 23:65–67. As mobile device 206 (within a car, in this example) approaches digital signage 202, the mobile device may receive wireless signals 208. *Id.* at 24:1–3. In one example, when mobile device 206 is within the transmission range of beacon 204, a mobile application (“mobile app”) may decode wireless signals 208 and display advertising content on mobile device 206. *Id.* at 24:5–10.

We further reproduce Figure 3 of the ’108 patent, below:

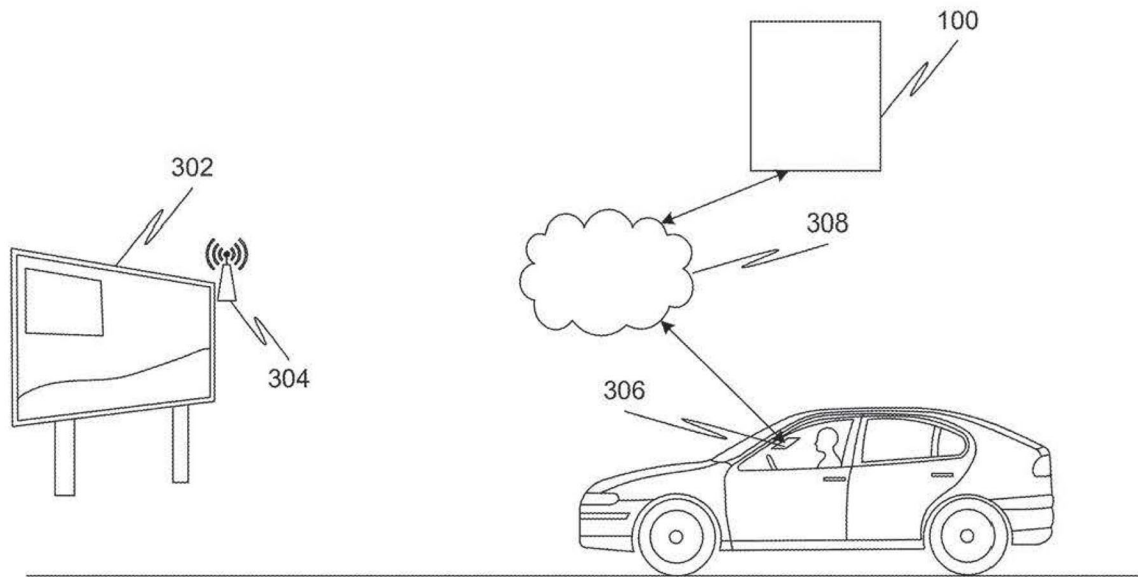


FIG. 3

Figure 3, reproduced above, “illustrates delivering advertisement content associated with traditional or digital signage to a mobile device of a user by communicating with an online platform, in accordance with some embodiments.” *Id.* at 4:24–27. In particular, Figure 3 illustrates delivering advertisement content with traditional or digital signage 302 to mobile device 306 of a user by communicating with online platform 100. *See id.* at 24:32–35, 24:38–43. Digital signage 302 may be installed with beacon 304 for transmitting wireless signals (208, shown in Fig. 2) containing advertisement content. *Id.* at 24:40–43. In one example, a mobile app is installed on mobile device 306 for periodically querying a global positioning system (“GPS”) receiver on mobile device 306 to determine the location of the mobile device. *Id.* at 24:45–47. The mobile app may transmit the location of mobile device 306 to online platform 100 over communication channel 308, which may be the wireless cellular network or the Internet. *Id.* at 24:48–51.

We further reproduce Figure 4 of the '108 patent, below:

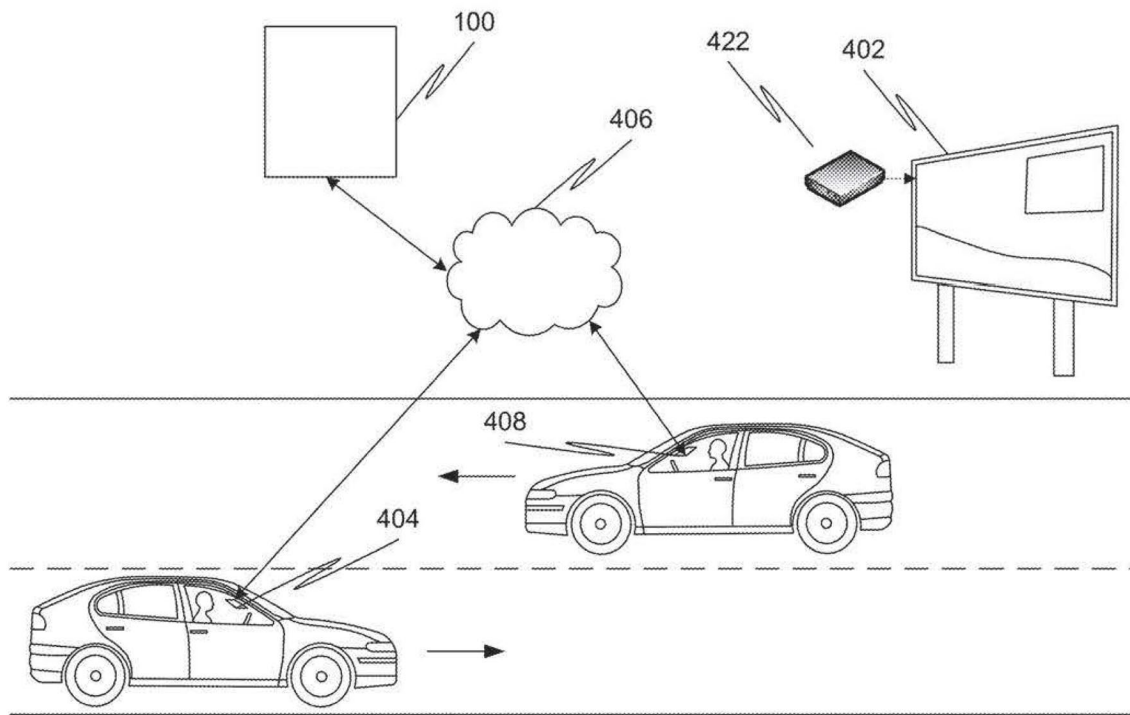


FIG. 4

Figure 4, reproduced above, “illustrates delivering advertisement content associated with traditional or digital signage to a mobile device of a user based on a relative direction of the user’s movement.” *Id.* at 4:28–31. Specifically, Figure 4 depicts traditional or digital signage 402 comprising attachable modem 422 to enable signage 402 to interface with a telecommunications network. *Id.* at 25:3–10. Signage 402 may be installed on one side of a highway such that it is only visible to users traveling on one-side of a two-way road. *See id.* at 25:13–17. The direction of travel of mobile device may also be determined. *See id.* at 25:21–23. For example, the direction of travel may be determined using data from a GPS receiver on mobile device 404 in conjunction with map information. *See id.* at 25:23–26. A mobile app on mobile device 404 may transmit direction of motion to

online platform 100 through communication channel 406 (e.g., the Internet or a wireless cellular network). *Id.* at 25:26–30. In another vehicle, with mobile device 408, which moves in a direction opposite that of mobile device 404, that vehicle and mobile device 408 may not be able to view digital signage 402. *See id.* at 25:36–39. As a result, online platform 100 may avoid delivering advertisement content to mobile device 408, and only deliver content to device 404 headed in a particular direction. *See id.* at 25:42–49.

In addition to delivering advertisements based on the direction the user is heading, demographic information may also be used for tailoring advertising content. *See id.* at 25:60–62.

D. Illustrative Claims

Petitioner challenges claims 1–23 of the '108 patent. Pet. 1. Claims 1, 13, and 20 are independent. Ex. 1001, 38:44–41:8. We reproduce independent claims 1, 13, and 20, below, with Petitioner's annotations to the claim elements in brackets:

1. A method comprising:
 - [Element 1(a)] specifying a content distribution campaign, the content distribution campaign comprising;
 - [1(a)(i)] a geolocation, and
 - [1(a)(ii)] media content associated with the geolocation;
 - [Element 1(b)] specifying a plurality of rules for the content distribution campaign, wherein specifying the plurality of rules comprises:
 - [1(b)(i)] specifying a first rule corresponding to a period of time,

[1(b)(ii)] specifying a second rule corresponding to at least one element of profile data associated with a consumer, and

[1(b)(iii)] specifying a third rule corresponding to a course of travel associated with the consumer;

[Element 1(c)] receiving a first indication that the consumer is at a first location within a radius of the geolocation;

[Element 1(d)] assessing, in response to the first indication, the at least one element of profile data associated with the consumer;

[Element 1(e)] receiving a second indication that the consumer is at a second location;

[Element 1(f)] determining the course of travel based, at least in part, on an analysis of the first location and the second location; and

[Element 1(g)] establishing that the consumer is eligible for the content distribution campaign when the plurality of rules is satisfied.

13. A method comprising:

[Element 13(a)] specifying a content distribution campaign comprising media content associated with a geolocation;

[Element 13(b)] specifying a plurality of rules for the content distribution campaign, wherein specifying the plurality of rules comprises:

[13(b)(i)] specifying the geolocation,

[13(b)(ii)] specifying a period of time, and

[13(b)(iii)] specifying at least one action to be performed by a consumer;

[Element 13(c)] receiving a first indication that the consumer is within a radius of the geolocation;

[Element 13(d)] tracking the consumer in response to receiving the first indication to determine whether the consumer has performed the at least one action; and

[Element 13(e)] establishing that the consumer is eligible for the content distribution campaign when the plurality of rules is satisfied.

20. A method, comprising:

[Element 20(a)] defining at least one of the following for a registered asset:

[20(a)(i)] a physical asset, and

[20(a)(ii)] a virtual asset;

[Element 20(b)] defining a media content associated with the registered asset, the media content comprising a first message and a second message;

[Element 20(c)] defining a consumer audience segment to be delivered the media content;

[Element 20(d)] defining a set of rules for providing the media content to the consumer audience segment, the set of rules comprising:

[20(d)(i)] a first rule corresponding a consumer's location in association with the registered asset, and

[20(d)(ii)] a second rule corresponding to at least one action performed by a consumer during a course of travel related to the consumer's location in association with the registered asset;

[Element 20(e)] receiving a first determination that the first rule has been satisfied;

[Element 20(f)] associating the first message with the consumer upon the first rule being satisfied;

[Element 20(g)] receiving a second determination that the second rule has been satisfied; and

[Element 20(h)] associating the second message with the consumer upon the second rule being satisfied.

Pet. iv, vi–viii (Petitioner's Claim Appendix).

E. Alleged Grounds of Unpatentability

Petitioner asserts that the Challenged Claims are unpatentable based on the following grounds (Pet. 5–6):

Grounds	Claims Challenged	35 U.S.C. § ¹	Reference(s)
1	1–23	102	Felt ²
2	1–23	103	Felt
3	13–19	103	Felt, Geer ³
4	1–23	103	Felt, Creemer ⁴
			Felt, Scofield ⁵
5	13–19	103	Felt, Creemer, Geer
			Felt, Scofield, Geer
6	1–23	103	Adharapurapu ⁶ , Felt
7	13–19	103	Adharapurapu, Felt, Geer

Petitioner relies on the testimony of Dr. Steven H. Goldberg (Exs. 1002, 1009).

Patent Owner submits testimony from Mr. Craig Bishop, which is testimony from earlier *inter partes* review IPR2021-00640. *See* Ex. 2004.

¹ The AIA version of 35 U.S.C. applies to this proceeding. *See* Ex. 1001, code (63) (indicating the earliest possible priority date as April 10, 2017).

² U.S. Pat. Pub. No. 2015/0095124 A1, published April 2, 2015 (Ex. 1004, “Felt” or “Verizon”).

³ U.S. Pat. Pub. No. 2015/0262214 A1, published Sept. 17, 2015 (Ex. 1005, “Geer”).

⁴ U.S. Pat. Pub. No. 2011/0171976 A1, published July 14, 2011 (Ex. 1006, “Creemer”).

⁵ U.S. Pat. No. 9,516,470 B1, issued Dec. 6, 2016 (Ex. 1007, “Scofield”).

⁶ EP 2,424,278 A1, published Feb. 29, 2012 (Ex. 1008, “Adharapurapu” or “Alcatel”).

II. ANALYSIS

A. Level of Ordinary Skill in the Art

The level of ordinary skill in the art is “a prism or lens” through which we view the prior art and the claimed invention. *Okajima v. Bourdeau*, 261 F.3d 1350, 1355 (Fed. Cir. 2001). The person of ordinary skill in the art (“POSITA” or “skilled artisan”) is a hypothetical person presumed to have known the relevant art at the time of the invention. *In re GPAC Inc.*, 57 F.3d 1573, 1579 (Fed. Cir. 1995). In determining the level of ordinary skill in the art, we may consider certain factors, including the “type of problems encountered in the art; prior art solutions to those problems; rapidity with which innovations are made; sophistication of the technology; and educational level of active workers in the field.” *Id.*

In the Institution Decision, we adopted Petitioner’s assessment that a person of ordinary skill in the art at the time of the invention (“POSITA”) 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*. Additional experience may substitute for specific education, or specific education may substitute for experience.

Inst. Dec. 10; *see also* Pet. 3 (citing Ex. 1002 ¶ 26).

Patent Owner adopts Petitioner’s definition for purposes of this Decision. *See* PO Resp. 3 (“For the purposes of this proceeding, Patent Owner accepts the definition . . . adopted by the Board’s Decision to Institute.” (citing Inst. Dec. 10)).

For purposes of this Final Written Decision, we continue to adopt Petitioner’s definition of a POSITA.

B. Claim Construction

In this *inter partes* review, claims are construed using the same claim construction standard that would be used to construe the claims in a civil action under 35 U.S.C. § 282(b). *See* 37 C.F.R. § 42.100(b) (2021). The claim construction standard includes construing claims in accordance with the ordinary and customary meaning of such claims as understood by one of ordinary skill in the art at the time of the invention. *See id.*; *Phillips v. AWH Corp.*, 415 F.3d 1303, 1312–14 (Fed. Cir. 2005) (en banc). In construing claims in accordance with their ordinary and customary meaning, we take into account the specification and prosecution history. *Phillips*, 415 F.3d at 1315–17.

If the specification “reveal[s] a special definition given to a claim term by the patentee that differs from the meaning it would otherwise possess[,] . . . the inventor’s lexicography governs.” *Phillips*, 415 F.3d at 1316 (citing *CCS Fitness, Inc. v. Brunswick Corp.*, 288 F.3d 1359, 1366 (Fed. Cir. 2002)). If an inventor acts as his or her own lexicographer, the definition must be set forth in the specification with reasonable clarity, deliberateness, and precision. *Renishaw PLC v. Marposs Societa’ per Azioni*, 158 F.3d 1243, 1249 (Fed. Cir. 1998).

Another exception to the general rule that claims are given their ordinary and customary meaning is “when the patentee disavows the full scope of a claim term either in the specification or during prosecution.” *Uship Intellectual Props., LLC v. United States*, 714 F.3d 1311, 1313 (Fed. Cir. 2013) (quoting *Thorner v. Sony Comput. Ent. Am., LLC*, 669 F.3d 1362, 1365 (Fed. Cir. 2012)).

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

In the Institution Decision, we addressed the terms “consumer” and “course of travel.” *See* Inst. Dec. 11–15. Patent Owner addresses these terms in its Patent Owner Response. *See* PO Resp. 10–12. We address these terms further, below.

1. “consumer”

In the Institution Decision, we declined to adopt Patent Owner’s construction of the term “consumer” to be limited to a “user or person to whom an advertisement is sent *to elicit engagement*.” *See* Inst. Dec. 11–13 (emphasis added). We disagreed with Patent Owner’s construction as Patent Owner’s interpretation would exclude people who may have received an advertisement, but not for the purpose of *eliciting engagement*. *See id.* at 13 (citing Prelim. Resp. 7–8). Rather, we determined that “consumer” should be construed by its plain and ordinary meaning. *Id.*

In its Patent Owner Response, Patent Owner proposes that the term “consumer” should be construed to mean “a user or person to whom an advertisement may be sent.” PO Resp. 11.

We decline to adopt Patent Owner’s revised interpretation. Patent Owner’s construction would presumably exclude people who may not be able to receive an advertisement, such as a person without access to the

cellular network or Internet. Aside from proposing a claim construction, Patent Owner does not explain or otherwise provide any support for its proposed construction. *See id.* Patent Owner does not cite to any intrinsic or extrinsic evidence or otherwise explain why the Board should construe “consumer” in this manner. *See id.* We find nothing in the Specification that reveals a special definition of “consumer” that is set forth with the requisite clarity, deliberateness, and precision to support Patent Owner’s construction. *Renishaw*, 158 F.3d at 1249; *Phillips*, 415 F.3d at 1316. Furthermore, Patent Owner did not disavow the plain and ordinary meaning of the term “consumer” during prosecution or in the Specification. *Uship*, 714 F.3d at 1313.

We maintain that the term “consumer” is construed by its plain and ordinary meaning, which is not limited to a “user or person to whom an advertisement is sent to elicit engagement.”

2. “*course of travel*”

In our Institution Decision, we agreed with the parties that “course of travel” should be given its plain and ordinary meaning. *See* Inst. Dec. 14 (citing Prelim. Resp. 8, Pet. 8).

In the Patent Owner Response, Patent Owner proposes that “course of travel” must be “based ‘at least in part, on an analysis of the first location and the second location.’” PO Resp. 12 (citing Ex. 1001, 38:65–67). “Patent Owner proposes ‘course of travel’ be given its plain and ordinary meaning, albeit requiring ‘at least in part, an *analysis of the first location and the second location*.’” *Id.* (emphasis added).

We decline to adopt Patent Owner’s construction that “course of travel” requires an analysis of “the first location and the second location.”

See PO Resp.11–12. Adopting Patent Owner’s construction would have us read limitations from claim 1 into claim 20, as Patent Owner’s construction is premised on a position that *all* of the claims expressly require that the course of travel is determined on an analysis of the first and second locations. *See id.* They do not.

Even if independent claim 1 recites, “determining the course of travel based, at least in part, on an analysis of the first location and the second location” (Ex. 1001, 38:65–67), claims 13–23 do not depend from claim 1 and do not recite this language (*see id.* at 39:56–41:8). Notably, independent claim 20 recites “course of travel,” but does not recite that the “course of travel” be “based ‘at least in part, on an analysis of the first location and the second location.’” *See id.* at 40:31–56.⁷

Additionally, we find nothing in the Specification that reveals a special definition of “course of travel” that is set forth with the requisite clarity, deliberateness, and precision to support Patent Owner’s construction. *Renishaw*, 158 F.3d at 1249; *Phillips*, 415 F.3d at 1316. Furthermore, Patent Owner did not disavow the plain and ordinary meaning of the term “course of travel” during prosecution or in the Specification. *Uship*, 714 F.3d at 1313.

Accordingly, we decline to read language from claim 1 into other claims, such as claim 20. Instead, we give “course of travel” its plain and ordinary meaning, without adopting Patent Owner’s construction that the “course of travel” must be “based ‘at least in part, on an analysis of the first location and the second location.’” PO Resp. 12.

⁷ Independent claim 13 and its dependent claims 14–19 do not recite “course of travel” at all. *See* Ex. 1001, 39:56–40:30.

3. *Other Claim Terms*

For purposes of this Decision, we need not and do not formally construe any other claim term. *See Realtime Data*, 912 F.3d at 1375.

C. *Principles of Law*

“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). This burden never shifts to Patent Owner. *Dynamic Drinkware*, 800 F.3d at 1378.

Petitioner’s challenge is based on anticipation and obviousness.
Pet. 1.

“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. of Cal.*, 814 F.2d 628, 631 (Fed. Cir. 1987). To establish anticipation, “all of the elements and limitations of the claim must be shown in a single prior reference, arranged as in the claim.” *Karsten Mfg. Corp. v. Cleveland Golf Co.*, 242 F.3d 1376, 1383 (Fed. Cir. 2001).

As for obviousness, the U.S. Supreme Court set forth the framework for applying the statutory language of 35 U.S.C. § 103 in *Graham v. John Deere Co. of Kansas City*, 383 U.S. 1, 17–18 (1966):

Under § 103, the scope and content of the prior art are to be determined; differences between the prior art and the claims at issue are to be ascertained; and the level of ordinary skill in the pertinent art resolved. Against this background, the obviousness or nonobviousness of the subject matter is

determined. Such secondary considerations as commercial success, long felt but unsolved needs, failure of others, etc., might be utilized to give light to the circumstances surrounding the origin of the subject matter sought to be patented.

The Court explained in *KSR International Co. v. Teleflex Inc.* that

[o]ften, it will be necessary for a court to look to interrelated teachings of multiple patents; the effects of demands known to the design community or present in the marketplace; and the background knowledge possessed by a person having ordinary skill in the art, all in order to determine whether there was an apparent reason to combine the known elements in the fashion claimed by the patent at issue. To facilitate review, this analysis should be made explicit.

550 U.S. 398, 418 (2007) (citing *In re Kahn*, 441 F.3d 977, 988 (Fed. Cir. 2006) (“[R]ejections on obviousness grounds cannot be sustained by mere conclusory statements; instead, there must be some articulated reasoning with some rational underpinning to support the legal conclusion of obviousness.” (alteration in original))).

“Whether an ordinarily skilled artisan would have been motivated to modify the teachings of a reference is a question of fact.” *WBIP, LLC v. Kohler Co.*, 829 F.3d 1317, 1327 (Fed. Cir. 2016) (citations omitted).

“[W]here a party argues a skilled artisan would have been motivated to combine references, it must show the artisan ‘would have had a reasonable expectation of success from doing so.’” *Arctic Cat Inc. v. Bombardier Recreational Prods. Inc.*, 876 F.3d 1350, 1360–61 (Fed. Cir. 2017) (quoting *In re Cyclobenzaprine Hydrochloride Extended-Release Capsule Patent Litig.*, 676 F.3d 1063, 1068–69 (Fed. Cir. 2012)).

We analyze the asserted grounds of unpatentability in accordance with these principles.

D. Grounds 1 and 2: Anticipated (Ground 1) or Obvious (Ground 2) over Felt

Petitioner submits that claims 1–23 are anticipated by (Ground 1) and obvious over (Ground 2) Felt. Pet. 1. Petitioner does not separate the anticipation and obviousness analysis. *See id.* at 5–23. Patent Owner further addresses these grounds collectively. *See* PO Resp. 12–45.

For consistency, we also address these grounds collectively. For the reasons discussed below, Petitioner has failed to show that claims 1–12 and 20–23 are anticipated by (Ground 1) or obvious over (Ground 2) Felt. Petitioner has shown, however, that Felt anticipates claims 13–19 (Ground 1) and that claims 13–19 would have been obvious over Felt (Ground 2).

1. Felt (Ex. 1004)

Felt, which Petitioner refers to as Verizon in the Petition (*see, e.g.*, Pet. 1), is a U.S. Patent Application titled, “Method and System for Realtime Display or Distribution of Advertisements” (Ex. 1004, code (54)). Felt discloses a “system and method for displaying marketing content at a predetermined location and at a predetermined time.” Ex. 1004, code (57). We reproduce Figure 1 of Felt, below:

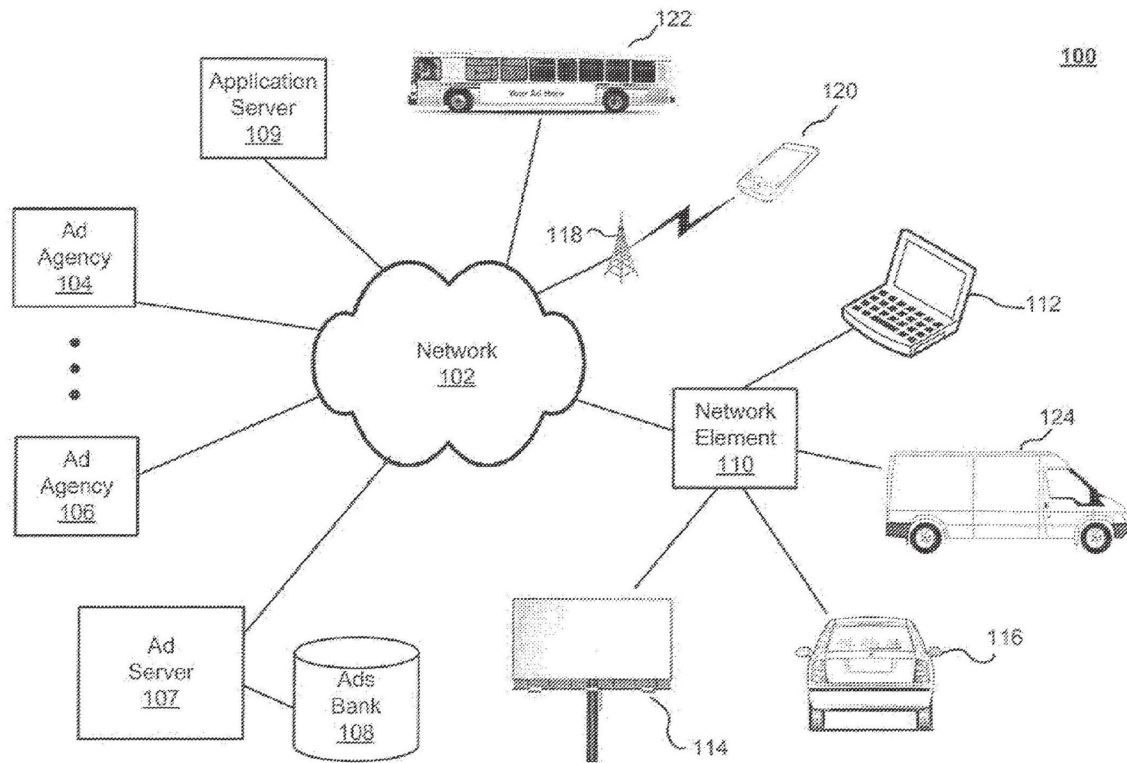


Fig. 1

Figure 1, reproduced above, “depicts a block diagram of a system architecture for processing and managing marketing content,” according to an exemplary embodiment of Felt’s invention. Ex. 1004 ¶ 4. In particular, Figure 1 depicts network 102 coupled with ad agency 104, ad server 107, ads bank 108, application server 109, network element 110, and wireless transceiver 118, which is shown as a cellular tower. *Id.* ¶ 21. Wireless device 120, depicted as a cellular phone, and network client 112, depicted as a laptop computer, are further coupled directly to network 102 or view transceiver 118. *Id.* Vehicles, such as personal automobile 116, bus 122, and van 124 are further shown connected to network 102 or network element 110. *Id.* Display 114 is further shown connected to network element 110, and may be a billboard, sign advertising board, poster, etc. *Id.*

2. *Independent Claim 1*

We address each of the limitations of the method of claim 1, as partitioned by Petitioner. *See* Pet. iv, 5–13.

a. Element 1(a) “specifying a content distribution campaign, the content distribution campaign comprising; [1(a)(i)] a geolocation, and [1(a)(ii)] media content associated with the geolocation”

Petitioner submits that Felt discloses Element 1(a), a method including the step of “specifying a content distribution campaign.” Pet. 5. Petitioner cites to Felt’s disclosure of a “method for displaying marketing content at predetermined locations . . . distributed to a mobile device.” *Id.* (citing Ex. 1004, Abstr.). As for the “content distribution campaign comprising” both a “geolocation” and “media content associated with the geolocation,” Petitioner submits that Felt discloses delivering content as the user/consumer travels from place-to-place, “where associated media content [is] delivered responsive to this travel, according to its campaign.” *Id.* at 5–6 (citing in part Ex. 1004, Fig. 1, ¶¶ 42, 43, 53, 54). Dr. Goldberg testifies in support of Petitioner’s position. *See* Ex. 1002 ¶¶ 239, 240.

Patent Owner contends that Felt does not disclose a “content distribution campaign.” PO Resp. 13; *see also id.* at 15 (“no ‘content distribution campaign’ is described in Petitioner’s cited paragraphs.”). Patent Owner argues that the cited portion of Felt “does not describe rules for sending content during predetermined time intervals, rather, it describes content that is already downloaded and resident on [a] mobile device.” *Id.* at 15–16. Patent Owner further submits that “Felt’s disclosed time period is only for displaying the already distributed and resident content, not for

determining when to *send* the content to the mobile device.” *Id.* at 16.

Patent Owner further submits that “Petitioner has misinterpreted the claim language to ignore that the ‘content distribution campaign’ is to a consumer who is associated with profile data.” *Id.* (citing Ex. 1001, 38:54–55).

Petitioner replies, “Patent Owner never explains what its ‘campaign’ is, but also fails to explain why Felt’s marketing program with categorization/association of marketing content to a broad class of consumer-audience members would not qualify.” Pet. Reply 2. Petitioner further submits that “Patent Owner further suggests that storing ads somehow negates campaigns, but fails to explain why its claims exclude storage.” *Id.*

We agree with Petitioner.

Patent Owner’s argument is divorced from the claim language. We agree with Petitioner that Patent Owner “fails to explain why its claims exclude storage.” Pet. Reply 2. Patent Owner does not advance a claim construction of “content distribution campaign” that would exclude the system or method taught in Felt. *See, e.g.*, PO Resp. 10–12. Element 1(a) merely requires the “content distribution campaign” to comprise “*a geolocation, and media content associated with the geolocation.*” Pet. iv (emphasis added).

Felt teaches a method of advertising to a mobile device and that the advertising is based on *geographical locations*. *See, e.g.*, Ex. 1004 ¶¶ 2, 15, 28, 36, 38, 42, 65. In particular, Felt discloses, “[t]he location data and/or proximity data may be used by decision module 212 in the determination of whether to display the marketing content and/or distribute the marketing content.” *Id.* ¶ 36. Patent Owner does not submit declaration evidence to

counter the testimony of Dr. Goldberg, which we find persuasive and supported by the evidence. We credit Dr. Goldberg's testimony that a "POSITA would understand that [Felt's] disclosure indicates that the term 'geolocation' is synonymous with 'location', as [Felt] discusses locations in the context of 'geographical' locations." Ex. 1002 ¶ 239.

For the reasons above, having weighed the evidence and the uncontroverted testimony of Dr. Goldberg, Petitioner has demonstrated by a preponderance of the evidence that Felt discloses the limitations recited in Element 1(a).

b. Element 1(b) "specifying a plurality of rules for the content distribution campaign, wherein specifying the plurality of rules comprises: 1(b)(i): specifying a first rule corresponding to a period of time, 1(b)(ii): specifying a second rule corresponding to at least one element of profile data associated with a consumer, and 1(b)(iii): specifying a third rule corresponding to a course of travel associated with the consumer"

Petitioner submits that Felt discloses Element 1(b). *See* Pet. 6–7.

Patent Owner argues that the limitation "requires three rules be satisfied prior to content distribution; however, the Petition improperly jumbles the three separate rule requirements together." PO Resp. 17 (citing Pet. 6–7). Patent Owner contends that the "Petition seeks to satisfy its burden of showing the three rules with a series of lengthy string cites with no explanations." *Id.* (citing Pet. 7). Patent Owner argues, "When claim element 1(b) is broken down into its component parts, the first rule relates to a period of time, the second rule relates to an element of profile data

associated with a consumer, and the third rule corresponds to a course of travel associated with the consumer.” *Id.* at 18.⁸

Petitioner replies that “claim 1 doesn’t mention ‘sending content during’ the time period, and merely specifies a rule ‘corresponding to’ a period in time, which includes future time within Felt’s network unavailability example.” Pet. Reply 3.

We disagree with Patent Owner’s arguments, including that the Petitioner merely addresses “the three rules with a series of lengthy string cites with no explanations.” PO Resp. 17. Rather, we find that the Petition addresses the three rules recited in Element 1(b) with sufficient particularity.

As to the “first rule corresponding to a period of time,” Petitioner cites to Felt’s teaching of content rules corresponding to hours of store operation, such as 11am–7pm or during breakfast and lunch. *See* Pet. 7 (citing Ex. 1004 ¶¶ 28, 42, 58). Felt discloses,

The marketing content may be categorized or assigned criteria by ad agencies 104, 106 or by ad server 107 based on type of marketing content (such as apparel, food, service, for example), value (such as \$ or % off), business(es) associated with the marketing content and the corresponding contact information of the business, including address, telephone number, and website, and other information relevant to the business, *such as hours of operation*.

⁸ Patent Owner further argues that the “‘course of travel’ associated with the consumer is neither disclosed nor taught in Felt.” PO Resp. 18. Patent Owner references the “first location and the *second location*” and submits that “Felt’s indicators are all associated with movement at a single point in time rather than at two different locations.” *See id.* at 18–19 (emphasis added). Although this argument is under the heading for Element 1(b), we address this argument under the analysis for Elements 1(e) and 1(f), which recite the “second” location. *See infra* § II.D.2.e.

Ex. 1004 ¶ 28 (emphasis added).⁹

As to the “second rule corresponding to at least one element of profile data associated with a consumer,” Petitioner cites to Felt’s teaching of consumer’s “age, ethnicity, employment status, income, education, languages, identity.” Pet. 7 (citing Ex. 1004 ¶¶ 47–50, 53, 55, 56, 66, 67). Felt discloses that “marketing content may be matched to a particular user using the user profile.” Ex. 1004 ¶ 47. Felt further discloses that

The user profile may also include social media hashtags associated with the user or various demographic data such as *age, ethnicity, employment status, home ownership status, income, education, or knowledge of languages*, for example.

Id. ¶ 48 (emphasis added). Felt’s disclosure of associating “age, ethnicity, employment status, home ownership status, income, education, or knowledge of languages” with its advertising campaign (*id.*) satisfies the “profile data associated with a consumer” limitation.

As to the “third rule corresponding to a course of travel associated with the consumer,” Petitioner cites to Felt’s teaching of “speed and/or direction of travel.” Pet. 7 (citing in part Ex. 1004 ¶ 36). Felt discloses that

Location/Proximity module 206 may comprise a WiFi, 3G, 4G, or Bluetooth component, a GPS receiver/processor, and/or other components to track the location of the mobile unit and/or nearby mobile devices to yield location data. The respective location of the mobile unit and/or mobile devices may be compared to obtain proximity data. *The location data and/or proximity data may be used by decision module 212 in the determination of whether to display the marketing content and/or distribute the marketing content.*

⁹ Bold emphasis to reference numerals in the U.S. Patents and Patent Applications is omitted in this Decision.

Ex. 1004 ¶ 36 (emphasis added). We agree that Felt’s teaching of using location data “in the determination of whether to display the marketing content and/or distribute the marketing content” (*id.*) satisfies the “course of travel associated with the consumer.”

We further credit the uncontroverted testimony of Dr. Goldberg, who testifies that Felt discloses rules corresponding to period of time, profile data, and course of travel, as recited in claim 1. Ex. 1002 ¶ 241 (citations omitted); *see also* Pet. 7 (citing the same).

For the reasons above, having weighed the evidence and uncontroverted testimony of Dr. Goldberg, Petitioner has demonstrated by a preponderance of the evidence that Felt discloses the limitations recited in Element 1(b).

c. Element 1(c) “receiving a first indication that the consumer is at a first location within a radius of the geolocation”

Petitioner submits that Felt discloses this limitation. Pet. 9–10. Petitioner cites to Felt’s teaching of using approximate proximity to determine the appropriate marketing content for distribution. *See id.* at 10 (citing Ex. 1004 ¶¶ 36, 44, 46, 52, 55, 65, 71, 72).

Patent Owner disagrees, arguing that “Petitioner’s argument misreads and fails to address the actual claim language.” PO Resp. 20. Patent Owner further argues, “[c]ompounding the lack of clarity in the Petition, Dr. Goldberg provides no additional insight, stating what he ‘understands’ and then citing multiple paragraphs of Felt without explanation.” *Id.* at 21 (citing Ex. 1002 ¶¶ 258–259). Patent Owner criticizes Dr. Goldberg’s testimony, contending that “Dr. Goldberg never describes how a POSITA would understand ‘proximity to a geolocation,’ *i.e.*, how somewhere around

the outside of the geolocation could be equated to the claim requirement of ‘within the radius of the geolocation.’” *Id.* (citing Ex. 1001, claim 1).

Patent Owner further argues that Felt’s disclosure of “network clients located in vehicles . . . or in display . . . are not consumers on mobile devices.” PO Resp. 22 (citations omitted). Patent Owner contends that “[m]obile devices are personal to a consumer, while additional network clients are located in vehicles delivering the advertisement—which means the vehicles are not ‘consumers.’” *Id.*; *see also id.* at 23 (arguing that Felt’s mobile units are not consumers); *see also id.* at 25 (“mobile unit 124 is not a consumer or consumer device.”). Patent Owner further contends that Dr. Goldberg’s testimony uses “a definition of ‘consumer’ inconsistently with the ’108 patent.” *Id.* at 24. Patent Owner presumes that Felt’s mobile units 124 are “commercial,” and is not based on the location of a consumer. *See, e.g.*, PO Sur-Reply 7 (“Felt’s ‘displaying particular marketing content on [commercial] mobile unit 124’ display is not based on the geolocation of consumer mobile unit 120; rather, it is associated with the proximity of mobile unit 124 to the mobile device 120.”). Patent Owner further argues that “Felt purposefully limits mobile unit 124 to a subset of vehicles used to display ads as it drives around and not personal non-consumer vehicles.” *Id.*

We disagree with Patent Owner for at least two reasons.

First, Petitioner is correct that “Felt’s mobility examples are not segmented by vehicles vs. consumers as Patent Owner suggests.” Pet. Reply 9.

Second, Patent Owner’s argument is premised on a position that advertisements sent to Felt’s vehicles (i.e., mobile unit 124) are commercial vehicles and not sent to “consumers.” *See, e.g.*, PO Resp. 25 (“mobile

unit 124 is not a consumer or consumer device”); *see also* PO Sur-Reply 7 (“Felt purposefully limits mobile unit 124 to a subset of vehicles used to display ads”). Contrary to Patent Owner’s contention, Felt discloses that “mobile unit 124 may be an individual consumer’s vehicle.” Ex. 1004 ¶ 45. Felt further discloses that mobile unit 124 may comprise *user profile data*. *See, e.g., id.* ¶ 48. For example, Felt discloses that

User settings established by the user within the application, or using an associated website on the Internet, may be stored on . . . *mobile device 110* . . . or on *mobile unit 124*. For example, user settings may comprise a user profile, which may include name or username, address, email address, gender, or financial information such as preferred credit card or checking account information. *The user profile may also include social media hashtags associated with the user or various demographic data such as age, ethnicity, employment status, home ownership status, income, education, or knowledge of languages, for example.*

Id. (emphases added). Notably, Felt discloses that mobile unit 124, which may be a consumer’s vehicle, may store the user’s profile data, including age and income information. *See id.* ¶¶ 45, 48.

Felt also discloses,

Location/Proximity module 206 may comprise a WiFi, 3G, 4G, or Bluetooth component, a *GPS receiver/processor*, and/or other components *to track the location of the mobile unit and/or nearby mobile devices to yield location data*. The respective location of the mobile unit and/or mobile devices may be compared to obtain proximity data. *The location data and/or proximity data may be used by decision module 212 in the determination of whether to display the marketing content and/or distribute the marketing content.*

Ex. 1004 ¶ 36 (emphases added). Importantly, Felt discloses the use of a GPS receiver to track the location of nearby *mobile devices and mobile units*

to yield location data. *Id.* Felt further discloses that the location data is used to determine whether to display the marketing content. *Id.* Felt provides a specific example in which advertisements may be displayed “relating to hotels, car rentals, tourism, nearby restaurants open for breakfast” if the user is “traveling through or stationed at Newark Airport.” *Id.* ¶ 42.

We credit Dr. Goldberg’s uncontroverted testimony that Felt’s examples of traveling proximate to geolocations, such as Newark airport, corresponds to receiving a first indication indicating that the consumer is within the proximity of the geolocation. *See* Ex. 1002 ¶ 260 (citing Ex. 1004 ¶¶ 41–44). We find persuasive Dr. Goldberg’s

opinion that, to the extent that [Felt] does not elaborately describe such aspects in exact terms of the claim, a POSITA, such as, for example, myself, would have appreciated that the system of [Felt] must receive some type of “indication”, such as instructions, a GPS ping on an internal map, or the like, when the mobile unit 124 reaches “location 1” . . . [o]therwise, the system would not be able to actively update the advertising content based on the time and location.

Id.

For the reasons above, having weighed the evidence and the uncontroverted testimony of Dr. Goldberg, Petitioner has demonstrated by a preponderance of the evidence that Felt satisfies the limitations recited in Element 1(c).

d. Element 1(d) “assessing, in response to the first indication, the at least one element of profile data associated with the consumer”

Petitioner submits that Felt discloses Element 1(d), explaining that “[w]hen [Felt’s] system receives indication that the user’s mobile device is in proximity to the geolocation of interest, the system determines content to

be distributed, including by assessing consumer profile data for correspondence.” Pet. 10 (citing Ex. 1004 ¶¶ 40, 42, 43, 47, 48–56, 67, 68, 76, Figs. 4, 8).

Patent Owner argues that “Felt . . . focuses on mobile units (124) that are not consumers or consumer devices.” PO Resp. 26; *see also id.* at 27 (“Felt further supports that mobile unit 124 (a non-consumer device) is the device being used to determine if the content is to be displayed.”). Patent Owner submits that “the Goldberg declaration conflates consumer mobile devices 120 and non-consumer devices, such as mobile unit 124.” *Id.* at 27 (citing Ex. 1002 ¶¶ 261–263). Patent Owner explains, “contrary to Dr. Goldberg’s testimony, Felt does not ‘assess profile data’ to determine whether to deliver content to mobile unit 124 because mobile unit 124 is part of the advertising network.” *Id.* at 28. Patent Owner further explains, “[m]obile unit 124 is not possessed by a consumer and so there is no profile data associated with mobile unit 124.” *Id.*

We disagree with Patent Owner’s argument for the reasons discussed above. Notably, Felt discloses, “mobile unit 124 may be an individual consumer’s vehicle.” Ex. 1004 ¶ 45. Contrary to Patent Owner’s assertions, Felt’s mobile unit 124 may be owned and driven by a consumer. *See, e.g.*, PO Resp. 28 (arguing incorrectly that “Mobile unit 124 is not possessed by a consumer.”).

Starting with the relevant claim limitation, Element 1(d) broadly recites, “assessing, in response to the first indication, the at least one element of profile data associated with the consumer.”

Felt discloses the use of a GPS receiver to track the location of nearby mobile devices to yield location data. Ex. 1004 ¶ 36. Felt further discloses

that the location data is used to determine whether to display the marketing content. *Id.* Felt further provides a specific example in which advertisements may be displayed “relating to hotels, car rentals, tourism, nearby restaurants open for breakfast” if the user is “traveling through or stationed at Newark Airport.” *Id.* ¶ 42.

Felt further discloses that its marketing system takes into account the user’s profile data, including age and gender, when marketing its content. *See, e.g.*, Ex. 1004 ¶ 48.

Accordingly, Felt assesses, in response to the first indication (e.g., the mobile device is traveling through Newark airport), at least one element of profile data associated with the consumer (e.g., age or gender).

Turning to Patent Owner’s argument, we agree with Petitioner that “Patent Owner undermines [its] ‘consumer’/‘non-consumer’ distinction by ignoring that Felt’s mobile unit 124 discussion expressly extends to mobile devices 120.” Pet. Reply 9. To illustrate this point, Petitioner provides an annotated version of Felt’s Figure 9 (Pet. Reply 10), a copy of which we reproduce, below:

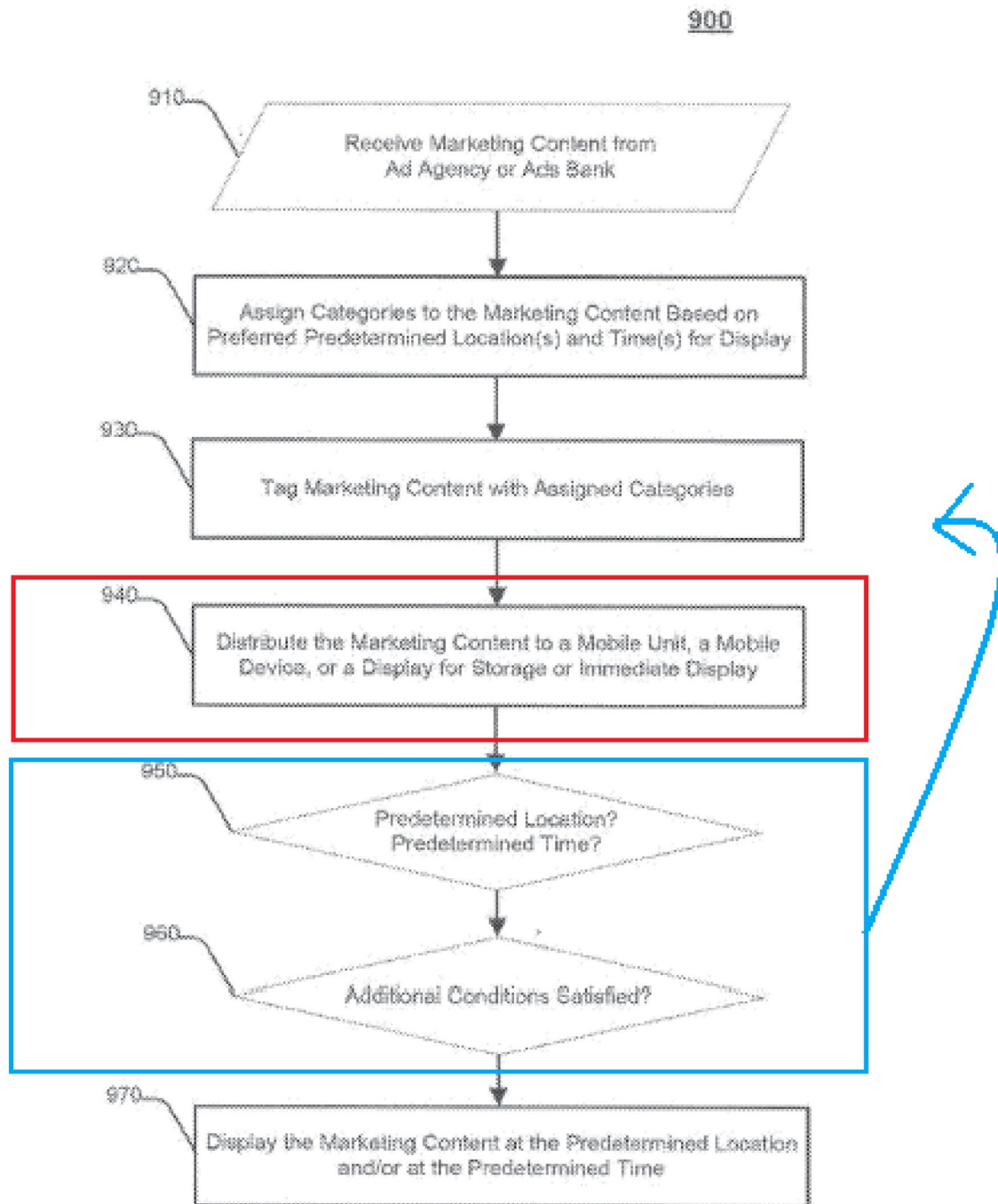


Fig. 9

Felt’s annotated Figure 9, reproduced above, depicts “an illustrative flowchart of a method for processing, distributing and displaying marketing content according to an exemplary embodiment.” Ex. 1004 ¶ 13. Petitioner annotates Figure 9 to include a blue box around two steps and a red box around one step. *See* Pet. Reply 9. Petitioner submits that

Felt distributes content to mobile devices (block 940), analyzes location/proximity (950), and considers categories/criteria (960). . . . Felt states that “blocks 950 and 960 may occur ***before*** [] ***distribution*** of marketing material.” . . . Thus, Felt “assessing” is [“]in response to” location, and concerns both examples Patent Owner deems as “consumer”/“non-consumer.”

Id. at 10 (citing Ex. 1004 ¶¶ 69–78). We agree with and credit Dr. Goldberg’s testimony that Felt’s “receiving indication that the user’s mobile device has come into proximity with the geolocation of interest causes the system to undertake its content consideration, which takes into account, for example, consumer profile data.” Ex. 1002 ¶ 262.

For the reasons above, having weighed the evidence and the uncontroverted testimony of Dr. Goldberg, Petitioner has demonstrated by a preponderance of the evidence that Felt discloses the limitations recited in Element 1(d).

- e. Element 1(e) “receiving a second indication that the consumer is at a second location”*
- and*
- Element 1(f) “determining the course of travel based, at least in part, on an analysis of the first location and the second location”*

Petitioner submits that Felt discloses Elements 1(e) and 1(f). *See* Pet. 11. Petitioner’s expert, Dr. Goldberg, testifies that Felt “discloses receiving a second indication and determining the course of travel according

to the execution of its rules corresponding to consumer course of travel.” Ex. 1002 ¶ 264 (citing Ex. 1004 ¶¶ 36, 42, 43, 45, 53, 58–60). Dr. Goldberg further testifies, “a POSITA would have appreciated [Felt’s] location tracking system, using GPS, to discuss comparison of discrete locations indicating course of travel, or would have implemented it as an application of known techniques to yield predictable results.” *Id.* ¶ 268 (citing Ex. 1004 ¶¶ 27, 36).

Patent Owner argues that “[t]his element is not found in Felt because Felt never discusses a *second location*.” PO Resp. 28 (emphasis added). Patent Owner submits that neither the Petition nor Dr. Goldberg’s declaration clearly sets forth where Felt teaches the receipt of a second indication at a second location. *See id.* (citing in part Pet. 11, Ex. 1002 ¶¶ 264–268). Patent Owner further references the “first location and the second location” and submits that “Felt’s indicators are all associated with movement at a single point in time rather than at two different locations.” *See id.* at 18–19; *see also supra* n. 8.

Petitioner replies that “Felt discloses [the] second indication both by its (i) realtime process and (ii) examples.” Pet. Reply 12. Petitioner further submits that a “stagnated single ad doesn’t fit Felt’s realtime arrangements” and “[l]ike the first ad for the first indication/location, continuing user movement yields a second indication and ad for the next location, under Felt’s operations.” *Id.* at 13 (citation omitted).

We agree with Patent Owner’s reading of Felt that the cited portion of Felt does not disclose “receiving a second indication that the consumer is at a second location” *and* “determining the course of travel based, at least in

part, on an analysis of the first location and the second location.” *See* PO Resp. 28–30 (citing Ex. 1004 ¶¶ 36, 42, 45, 58–60).

Petitioner’s challenge under Grounds 1 and 2 does not sufficiently address Elements 1(e) and 1(f). *See* Pet. 11–12. In particular, the Petition fails to establish, by a preponderance of the evidence, that Felt discloses the step of “determining the course of travel based, at least in part, on an analysis of the first location *and the second location*.” More specifically, the Petition (*see* Pet. 11) and cited portion of Dr. Goldberg’s declaration (*see* Ex. 1002 ¶¶ 264–268) fail to set forth where Felt teaches the receipt of a *second indication* at a *second location*. Although Dr. Goldberg testifies that GPS “commonly compare discrete location point differences to determine course such as by speed and direction” (Ex. 1002 ¶ 268), this does not fully address the step of “receiving a second indication that the consumer is at a second location,” as recited in Element 1(e). Furthermore, and as pointed out correctly by Patent Owner, “[i]mplicit disclosure of speed and location does not address the course of travel using a first and second location, as required by [Element 1(f)].” PO Resp. 31.

In addition to failing to disclose the steps recited in Elements 1(e) and 1(f), the Petition fails to provide a reason why a skilled artisan would have modified Felt’s system to satisfy the claimed steps based on Felt, alone. *See* Pet. 11–12.¹⁰

Accordingly, the Petition fails to establish that Felt satisfies Element 1(e) or 1(f).

¹⁰ Below, we address claim 1 as unpatentable over Felt in view of Creemer or Scofield. *See infra* § II.E.3.

f. Element 1(g) “establishing that the consumer is eligible for the content distribution campaign when the plurality of rules is satisfied”

Petitioner submits that Felt discloses this limitation, citing in part its analysis under Element 1(b). *See* Pet. 12 (citing Ex. 1004 ¶¶ 42, 43, 47–49; Ex. 1002 ¶¶ 274, 275).

Patent Owner argues that Element 1(g) “is not disclosed because there is no content distribution campaign, nor are the plurality of rules satisfied, there is only delivery of content in Felt.” PO Resp. 32.

For the reasons discussed above in connection with our analysis under Elements 1(a) and 1(b), we disagree with Patent Owner.

Rather, we find persuasive and credit Dr. Goldberg’s uncontroverted testimony that Felt “discloses delivery of content under conditions satisfying its rules . . . including appropriate aspects of the user profile.” Ex. 1002 ¶ 274 (citing Ex. 1004 ¶¶ 42, 43, 47–49, Fig. 4).

For the reasons above, having weighed the evidence and the uncontroverted testimony of Dr. Goldberg, Petitioner has demonstrated by a preponderance of the evidence that Felt discloses the limitations recited in Element 1(g).

g. Summary of Independent Claim 1

Because Petitioner fails to establish that Felt satisfies Elements 1(e) or 1(f), Petitioner fails to establish that claim 1 is anticipated (Ground 1) or obvious over (Ground 2) Felt.

3. *Dependent Claims 2–12*

Claims 2–12 depend from independent claim 1. Ex. 1001, 39:4–55. In addressing these claims under Grounds 1 and 2, Petitioner relies on the same analysis relied upon in challenging claim 1. *See* Pet. 13–20. For the same reasons discussed above in relation to whether Felt anticipates or renders obvious claim 1, the Petition fails to demonstrate, by a preponderance of the evidence, that Felt anticipates or renders obvious claims 2–12.

4. *Independent Claim 13*

We address each of the limitations of the method of independent claim 13 as partitioned by Petitioner. *See* Pet. vi–vii, 5–13.

a. [Element 13(a)] “specifying a content distribution campaign comprising media content associated with a geolocation”

Petitioner submits that Felt discloses this limitation. Pet. 20 (citing Ex. 1004, Abstr., ¶¶ 2, 15, 28, 36, 38, 42, 54, 65, Figs. 1–9).

Patent Owner does not specifically address Element 13(a). *See* PO Resp. 33–35.

Felt discloses a system and method in which “marketing content at a predetermined location and at a predetermined time is disclosed.” Ex. 1004, code (57). Felt further discloses that the “marketing content may be displayed on a mobile vehicle unit and also distributed to a mobile device within the proximity of the mobile vehicle unit.” *Id.*

We find persuasive and credit Dr. Goldberg’s uncontroverted testimony that

[Felt] discloses a method comprising specifying a content distribution campaign in that [Felt] establishes its communication platform including specification of requirements concerning geolocation and related media content. . . . A POSITA would understand that [Felt's] disclosure indicates that the term "geolocation" is synonymous with "location", as [Felt] discusses locations in the context of "geographical" locations.

Ex. 1002 ¶ 300 (citing Ex. 1004 ¶¶ 2, 15, 28, 36, 42, 54, 65, Figs. 1–9, Abstr.).

For the reasons above, having weighed the evidence and the uncontroverted testimony of Dr. Goldberg, Petitioner has demonstrated by a preponderance of the evidence that Felt discloses the limitations recited in Element 13(a).

- b. [Element 13(b)] "specifying a plurality of rules for the content distribution campaign, wherein specifying the plurality of rules comprises: [13(b)(i)] specifying the geolocation, [13(b)(ii)] specifying a period of time, and [13(b)(iii)] specifying at least one action to be performed by a consumer"*

Petitioner submits that Felt discloses these limitations, referencing its analysis under claim 1. *See* Pet. 21. Petitioner explains, "[i]n comparison to claim 1, claim 13 recites specifying the geolocation as a subfeature of specifying rules rather than the campaign itself. The difference does not appear to have meaningful distinction in the claims, and is not directly explained within the specification." *Id.*

Patent Owner argues that the Petition fails to specifically address the sub-elements of Element 13(b), as it simply provides unexplained string cites. *See* PO Resp. 33 (citing Pet. 21–22). Patent Owner further argues that "claim 13 requires the consumer act *before* the consumer is determined to be

eligible for the content distribution campaign.” *Id.* at 34 (citing Ex. 1001, 40:4–6). Patent Owner submits that the Petition “fails to identify where the claimed three rules are defined in Felt, and it fails to show how Felt’s alleged consumer action occurs before content delivery to the consumer.” *Id.*

We disagree with Patent Owner’s argument as Element 13(b) does not require the “consumer [to] act *before* the consumer is determined to be eligible for the content distribution campaign,” as Patent Owner argues. *Compare* PO Resp. 34, *with* Ex. 1001, 39:59–61. Patent Owner cites to the Specification for support of its position, but we do not import limitations from the Specification into the claims. *Superguide Corp. v. DirecTV Enterprises, Inc.*, 358 F.3d 870, 875 (Fed. Cir. 2004) (“Though understanding the claim language may be aided by the explanations contained in the written description, it is important not to import into a claim limitations that are not a part of the claim.”).

We further disagree with Patent Owner that the Petition merely provides unexplained string cites. *See* PO Resp. 33 (citing Pet. 21–22).

Petitioner submits that “[Felt’s] rules for content distribution concern consumer actions to click links, add to wishlists, and other ‘historical actions.’” Pet. 22 (Ex. 1004 ¶¶ 40, 43, 46, 47, 50, 53, 57, 66). Petitioner further explains that “[Felt] weights [sic] consumer actions in determining content distribution according to the rules.” *Id.* (citing Ex. 1004 ¶ 50; Ex. 1002 ¶ 304).

In one example, when Felt’s system receives information that a consumer “clicks a link,” Felt’s system performs the step of “specifying at least one action to be performed by a consumer,” as recited in the claim.

We credit and find persuasive Dr. Goldberg’s testimony that

[Felt’s] specifying of geolocation also meets the limitation as a subfeature of rules. [Felt] discloses its communication platform to be defined by rules/requirements, including geolocation and time periods. [Felt ¶¶][0028] (advertiser content, geographical locations of businesses or displays), [0036] (proximity), [0042] (geolocations and associated content), [0054] (“businesses associated with marketing content”), [0065], FIGs. 1-9. Also, [Felt] discloses its content rules to correspond to relevant hours of store operation ([Felt], ¶¶[0028] (11am-7pm), [0042] (breakfast/lunch, evening), [0058]), and also specifying “predetermined times or intervals” (*id.*, ¶[0054], *see also id.*, ¶[0047]). I note that a POSITA would understand that [Felt’s] disclosure indicates that the term “geolocation” is synonymous with “location”, as [Felt] discusses locations in the context of “geographical” locations. Also, I note that [Felt] discloses specification of content for delivery such that as the user/consumer travels between/from geolocations. [Felt], ¶¶[0042], [0043], [0053], [0054][.]

Ex. 1002 ¶ 303. Although Dr. Goldberg’s testimony includes numerous citations to Felt, we find that the citations include parenthetical explanations summarizing their relevancy in support of the testimony. *See id.* We do not find Petitioner’s or Dr. Goldberg’s evidence as a compilation of unexplained string citations, as Patent Owner argues. *See* PO Resp. 33 (citation omitted).

For the reasons above, having weighed the evidence and the uncontroverted testimony of Dr. Goldberg, Petitioner has demonstrated by a preponderance of the evidence that Felt discloses the limitations recited in Element 13(b).

- c. [Element 13(c)] “receiving a first indication that the consumer is within a radius of the geolocation”*

Petitioner submits that Felt discloses this limitation, relying in part on the testimony of Dr. Goldberg. *See* Pet. 22 (citations omitted).

Patent Owner attacks Dr. Goldberg’s testimony, arguing that Dr. Goldberg applies “an improper POSITA obviousness standard” when describing the teachings of Felt. *See* PO Resp. 35 (“Providing evidence that a POSITA must have forty years of experience and a Ph.D. in Electrical Engineering . . . is an application of an improper POSITA obviousness standard applied to the description and teachings of Felt.”) (citing Ex. 1002 ¶¶ 4–5). Patent Owner further argues,

Petitioner has failed to meet its burden of establishing that this element is present in Felt, and claim 13 is therefore not anticipated by Felt. Moreover, no evidence is provided in the Petition or Declaration . . . that a POSITA would modify the teachings of Felt to arrive at the claimed invention.

Id. (citing Ex. 1002).

We disagree with Patent Owner. Patent Owner’s argument presumes that Dr. Goldberg demands extraordinary qualifications for a POSITA. *See* PO Resp. 35. Dr. Goldberg makes no such assertion. *See* Ex. 1002 ¶¶ 4, 5. Moreover, Patent Owner adopts Petitioner’s definition and the Board’s definition of a POSITA, which Dr. Goldberg endorses. *See supra* § II.A; *see also* PO Resp. 3. Further, we find that Dr. Goldberg’s education and experience qualify him as a POSITA. *Compare supra* § II.A, *with* Ex. 1002 ¶¶ 4–15; *see also* Ex. 1002 ¶ 305 (testifying that he is a POSITA).

Furthermore, Patent Owner’s arguments are not directed to the claim language or to the particular identified evidence or arguments made by Petitioner.

We find persuasive and credit Dr. Goldberg’s uncontroverted testimony that

a POSITA, such as, for example, [himself], would have appreciated that the system of [Felt] must receive some type of “indication”, such as instructions, a GPS ping on an internal map, or the like, when the mobile unit 124 reaches “location 1”, “location 2”, etc. Otherwise, the system would not be able to actively update the advertising content based on the time and location.

Ex. 1002 ¶ 305. Dr. Goldberg’s uncontroverted testimony establishes that in order for Felt’s system to work correctly, it must receive “indications,” such as a GPS ping from mobile unit 124, thereby satisfying the step of “receiving a first indication that the consumer is within a radius of the geolocation.” *See* Ex. 1002 ¶ 305.

Dr. Goldberg further testifies that “[Felt] notes that consumers ‘acting upon’ content includes e-shopping, mapping locations of businesses, and physically traveling to businesses.” *Id.* (citing Ex. 1004 ¶ 53). We agree with Dr. Goldberg that “[Felt] makes clear that consideration of user action would occur in response to an indication that the user is located at location 1.” *Id.*

For the reasons above, having weighed the evidence and the uncontroverted testimony of Dr. Goldberg, Petitioner has demonstrated by a preponderance of the evidence that Felt discloses the limitations recited in Element 13(c).

- d. *[Element 13(d)] “tracking the consumer in response to receiving the first indication to determine whether the consumer has performed the at least one action”*

Petitioner submits that Felt discloses this limitation. *See* Pet. 22–23. Petitioner explains that “[Felt’s] consumers ‘acting upon’ content includes e-shopping, mapping locations of businesses, and physically traveling to businesses.” *Id.* at 22 (citing Ex. 1002 ¶ 53). Petitioner further explains that “once the initial content is provided by *occupying the geofence radius*, [Felt] responsively tracks the consumer activity to determine performance of the action, as recited, including as it weighs on [Felt’s] ad tailoring.” *Id.* at 22–23 (citing Ex. 1004 ¶¶ 42, 50, 53; Ex. 1002 ¶ 306) (emphasis added). Petitioner further submits that “activity within [Felt’s] process includes updating and *tracking as the user travels*, and thus consumers not traveling to the business location may be deemed not to ‘act upon’ the content.” *Id.* at 23 (citing Ex. 1004 ¶¶ 42, 43; Ex. 1002 ¶¶ 305, 306) (emphasis added).

Patent Owner argues that Felt does not disclose Element 13(d). *See* PO Resp. 36 (referencing its analysis under Element 13(c)); *see also id.* at 35 (addressing Element 13(c)). Patent Owner submits that Petitioner has failed to show that Felt discloses this element. *See id.* at 36.

In Petitioner’s Reply, Petitioner responds,

Patent Owner perfunctorily addresses various elements
. . . . Contrary to assertions, Dr. Goldberg applied ordinary skill
. . . supported Felt’s serial location-based ads as broadly
applicable . . . [and] Felt’s realtime targeted ad program
discloses the campaign despite allegedly missing aspects.

Pet. Reply 15 (citations omitted).

Patent Owner does not respond to Petitioner’s Reply argument. *See* PO Sur-reply 2–11 (arguing only claims 1 and 20 under Ground 1).

For the reasons above, having weighed the evidence, including Dr. Goldberg’s uncontroverted testimony, we agree with Petitioner that Felt discloses Element 13(d). We credit Dr. Goldberg’s uncontroverted testimony that Felt “discloses responsive tracking to consider the consumers’ acts upon content.” Ex. 1002 ¶ 305 (citations omitted). In support of his testimony, Dr. Goldberg explains that Felt “notes that consumers ‘acting upon’ content includes e-shopping, mapping locations of businesses, and physically traveling to businesses.” *Id.* citing (Ex. 1004 ¶ 53). We further credit Dr. Goldberg’s testimony that

to the extent it is contended that [Felt] does not describe responsive assessment, a POSITA, such as, for example, [himself], would have appreciated that, for example, the system of [Felt] furthers the assessment of whether to deliver content once an indication is received from an exemplary first location (*i.e.* “location 1”) that the mobile unit 124 is in that area. In other words, the assessment of consumer action, and thus the determination of whether to deliver content to the mobile unit 124, must be responsive to the mobile unit 124 being located at location 1. . . . [and that] this is true because, for example, if the user were to take an action immediately after reaching location 1, [Felt’s] disclosure makes clear that such an action would be taken into account for delivering content. As such, [Felt] makes clear that consideration of user action would occur in response to an indication that the user is located at location 1.

Ex. 1002 ¶ 305.

We further credit Dr. Goldberg’s testimony that Felt “provides media content as the consumer enters the radius of the geolocation, e.g., Manhattan, and consumer actions are tracked, including to determine when the consumer travels to the business location for content tailoring.” Ex. 1002 ¶ 306 (citing Ex. 1004 ¶¶ 42, 53). We agree with Dr. Goldberg’s testimony that “once the initial content is provided when the device is within

an initial geofence radius, [Felt's] system will responsively track the consumer activity to determine performance of the action . . . [and that this] would include the system weighing factors for ad tailoring.” *Id.* (citing Ex. 1004 ¶¶ 42, 53).

For the reasons above, having weighed the evidence and the uncontroverted testimony of Dr. Goldberg, Petitioner has demonstrated by a preponderance of the evidence that Felt satisfies the limitations recited in Element 13(d).

e. [Element 13(e)] establishing that the consumer is eligible for the content distribution campaign when the plurality of rules is satisfied”

Petitioner submits that Felt discloses this limitation. Pet. 23.

Patent Owner argues that “[t]he Petition and Declaration . . . provide no evidence that Felt teaches this element.” PO Resp. 36 (citing Ex. 1002 ¶ 307).

We disagree with Patent Owner. Rather, we agree with and credit Dr. Goldberg’s uncontroverted testimony that Felt

discloses establishing eligibility based on satisfying rules including relevance weighting . . . [and that Felt] discloses its operations in terms of the rules/requirements and describes their execution by example, including culminating in delivery of the appropriate content. . . . [nothing that Felt’s] general intent to provide targeted content indicates its rules-based content determination and delivery.

Ex. 1002 ¶ 307 (citing Ex. 1004 ¶¶ 40, 42, 43, 50, 53).

For the reasons above, having weighed the evidence and the uncontroverted testimony of Dr. Goldberg, Petitioner has demonstrated by a

preponderance of the evidence that Felt discloses the limitations recited in Element 13(e).

f. Summary of Independent Claim 13

Petitioner has shown, by a preponderance of the evidence, that Felt anticipates claim 13 (Ground 1) and that claim 13 would have been obvious over Felt (Ground 2).

5. Dependent Claims 14–19

Petitioner asserts that the subject matter of dependent claims 14–19 are anticipated (Ground 1) and rendered obvious (Ground 2) over Felt and provides a detailed analysis of each of these claims with argument and evidence in support thereof. *See* Pet. 23–27. Patent Owner relies on its arguments directed to claim 13, but does not raise any arguments directed specifically to claims 14–19. *See* PO Resp. 36–37.

Weighing the evidence and uncontroverted testimony of Dr. Goldberg, Petitioner shows by a preponderance of the evidence that Felt anticipates claims 14–19 (Ground 1) and that claims 14–19 would have been obvious over Felt (Ground 2). We adopt Petitioner’s arguments and cited evidence as to these claims and limitations as our own determination and basis. *See* Pet. 40–65.

6. Independent Claim 20

Independent claim 20 recites, “receiving a second determination that the second rule has been satisfied,” which “second rule correspond[s] to at least one action performed by a consumer during a course of travel”

(Element 20(g)). Ex. 1001, 40:53–54. Petitioner submits that Felt discloses this limitation. *See* Pet. 29–30.

Patent Owner argues that the Petition fails to address this element. *See* PO Resp. 43–44. Patent Owner further argues that neither the Petition nor Dr. Goldberg’s testimony sufficiently explain Felt. *Id.* at 44 (citing Pet. 29–30; Ex. 1002 ¶ 324). Patent Owner explains, “the first and second messages relied on by Petitioner are simply different ads for different businesses . . . [and that] there is only one message.” *Id.* at 40 (addressing a related limitation).

Petitioner replies that

Felt provides a first ad message resulting from user presence within radius of a business. As the user moves towards the business, Felt’s realtime program updates ad messaging. . . . Felt’s ads and businesses range from airport restaurants to Broadway shows; and as speed/direction/proximity/manner are determined, *other messages ripen in relevance and realtime ads reflect the course of travel.* . . .

Felt also considers user actions ‘upon’ content, e.g., *physically approaching a business.* . . . Felt “continuously monitor[s]” weightings from user acts, and outweighed messages are displaced by second messages correlated with user actions. . . . These location-based updates are within Felt’s routine operations, and free of specific architectures. Felt’s serial ad examples disclose different messages (AD1-AD3) including interrelated updates, varying target locations, different promotions, or similar. . . . Reacting to a first ad by navigating to a business location, Felt updates weighting and yields another ad with different promotion/information—*quintessential realtime advertising.*

Pet. Reply 16–17 (citing Ex. 1004 ¶¶ 42, 43, 50, 53; Pet. 29–30) (emphases added).

We agree with Patent Owner. In particular, we agree with Patent Owner that Petitioner’s challenge “makes no sense to use ‘physically approaching’ a business as a rule for some claim elements and then change back [to] a course of travel for other elements in the same claim.” PO Sur-reply 11.

Upon reviewing the Petition, Petitioner fails to make clear what, exactly, the “first” and “second” messages allegedly are. *See* Pet. 29–30. The Petitioner states, “[Felt] discloses defining media content to include first and second messages, such as subsequent ads of different types (e.g., wholly different businesses concerning the same asset[]).” *Id.* at 27. Even if we accept the assertion that the “first” and “second” messages are simply “subsequent ads of different types,” it is not clear from the Petition how Felt satisfies “associating the first message [i.e., initial ad] with the consumer upon the first rule being satisfied” while “associating the second message [i.e., subsequent ad] with the consumer upon the second rule being satisfied.” *See* Pet. 27, 29–30. The Petition fails to establish that Element 20(g) is satisfied by Felt.

The Petition fails to demonstrate, by a preponderance of the evidence, that Felt satisfies Element 20(g) and, therefore, fails to demonstrate that Felt anticipates or renders obvious claim 20.

7. *Dependent Claims 21–23*

Claims 21–23 depend from independent claim 20. Ex. 1001, 40:57–41:8. In addressing these claims under Grounds 1 and 2, Petitioner relies on the same analysis relied upon in challenging claim 20. *See* Pet. 45. For the same reasons discussed above in relation to whether Felt anticipates or

renders obvious claim 20, the Petition fails to demonstrate, by a preponderance of the evidence, that Felt anticipates or renders obvious claims 21–23.

8. *Summary of Grounds 1 and 2*

Petitioner has shown, by a preponderance of the evidence, that Felt discloses all the limitations of claims 13–19. Accordingly, Felt anticipates claims 13–19 (Ground 1) and claims 13–19 would have been obvious over Felt (Ground 2).¹¹

Petitioner has failed to show, by a preponderance of the evidence, however, that any of claims 1–12 and 20–23 are anticipated by Felt (Ground 1) or unpatentable as obvious over Felt (Ground 2).

E. Ground 4: Obvious over Felt and Creemer or Scofield

Petitioner submits that claims 1–23 would have been obvious over Felt in view of Creemer or Scofield. *See* Pet. 1, 5–34.

1. Creemer

Creemer is a U.S. Patent Publication titled “Identifying Client Patterns Using Online Location-Based Derivative Analysis.” Ex. 1006, code (54). Creemer discloses a method and system for targeting content, such as an advertisement, according to location-based information derived from a

¹¹ Petitioner does not separate the anticipation and obviousness analysis. *See* Pet. 5–23. ¹² Although the heading in the Petition only lists Element 20(e), and not Elements 20(f)–(h), we understand that this is a typographical error, as Petitioner’s analysis focuses on the limitations recited in Elements 20(e)–20(h). *See* Pet. 61–63; *see also* Ex. 1002 ¶¶ 406–412 (addressing Elements 20(e)–(h) under Ground 6).

mobile wireless transceiver device. *Id.* at code (57). Creemer further discloses that position information as a function of time is used to calculate a rate of travel and a direction of travel, which may be used to identify a likely mode of transportation. *Id.* Geographical information may also be used to further refine the mode of transportation. *Id.* We reproduce Figure 8 of Creemer, below:

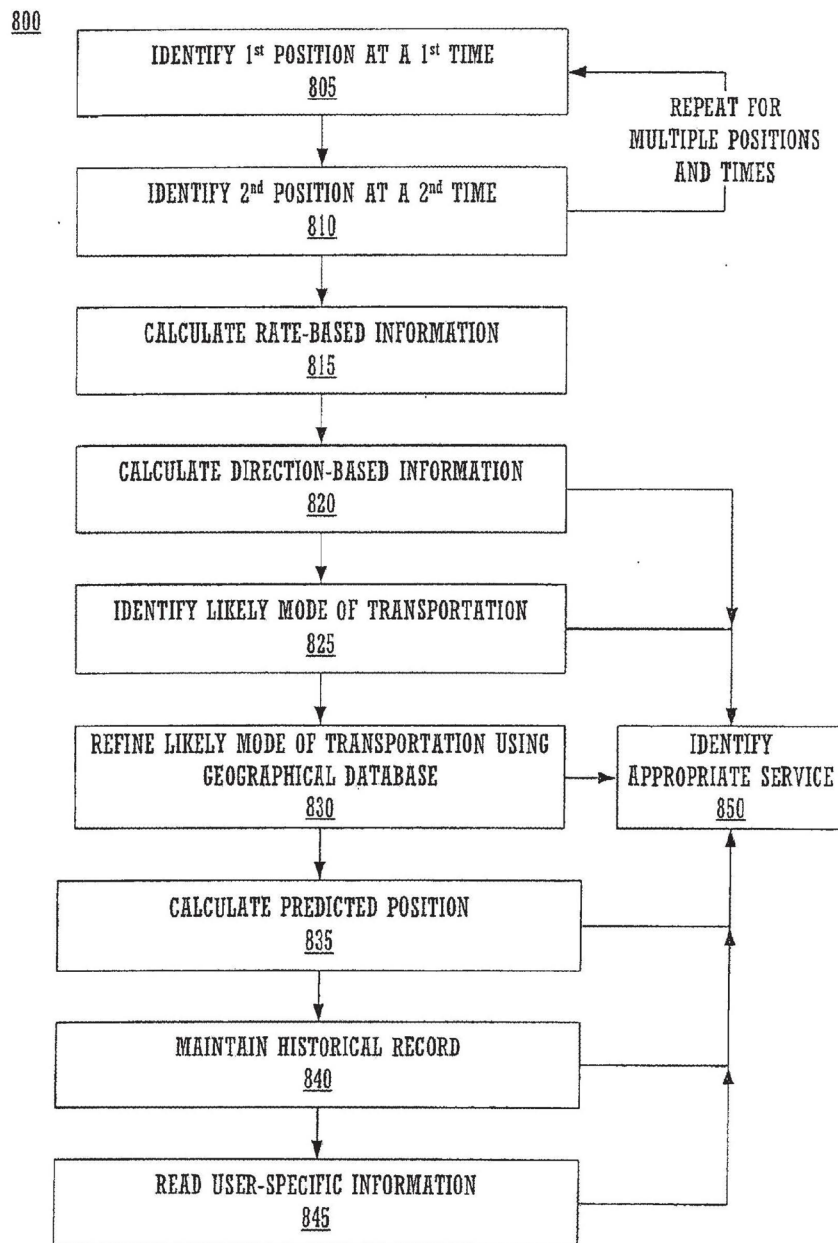


FIGURE 8

Figure 8, reproduced above, “is a flowchart of the steps in a process for targeting services according to location-based information derived from a wireless transceiver.” Ex. 1006 ¶ 28. In the first step, step 805, the location of the wireless communication device (i.e., the user) is identified at a first time. *Id.* ¶ 59. In the next step, step 810, a second position is measured at a

second time. *Id.* ¶ 61. Afterwards, in step 815, the position and time calculation from steps 805 and 810 are used to calculate rate-based information such as the user’s rate of travel. *Id.* ¶ 82. In step 820, the following step, direction-based information is calculated, such as the direction of travel, from the position information of steps 805 and 810. *Id.* ¶ 63. The rate-based information from step 815 and the direction-based information from step 820 are used to provide a “rate-position vector,” including the user’s rate and direction of travel for the user’s journey. *Id.* ¶ 64.

2. *Scofield*

Scofield is a U.S. Patent titled “System and Method for Providing Advertising Based on Mobile Device Travel Patterns.” Ex. 1007, code (54). Scofield discloses that a “mobile device user’s recent movements may be analyzed to determine trails or traffic patterns for device user among various locations.” *Id.* at code (57). Scofield further discloses that mobile device trail information, either for an individual user or aggregated for multiple users, may be analyzed to determine a next destination for the user. *Id.* Creemer explains that advertising content, such as advertisements, coupons and/or other communications, associated with the next destination may be sent to the mobile device. *Id.*

3. *Independent Claim 1*

As explained above, under Grounds 1 and 2, the Petition failed to show that Felt’s method of advertising satisfies Elements 1(e) or 1(f).

Element 1(e) recites the step of “receiving a second indication that the consumer is at a second location,” while Element 1(f) recites the step of “determining the course of travel based, at least in part, on an analysis of the first location and the second location.” Pet. iv.

In presenting its challenge under Ground 4, Petitioner consolidates its analysis with Grounds 1 and 2. *See* Pet. 5–34. Petitioner relies on Creemer and Scofield under Ground 4 to address Elements 1(e) and 1(f). *See id.* at 11.

Regarding Creemer’s teachings, Petitioner submits that “Creemer discloses considering first and second locations of the consumer’s mobile device to determine the user’s path as the course of travel.” Pet. 11 (citing Ex. 1006 ¶¶ 62–66, Fig. 8). Petitioner further submits that “Creemer discloses such comparison to apply the user’s path for targeted content.” *Id.* (citing Ex. 1006 ¶¶ 59–66; Ex. 1002 ¶¶ 270–271).

Regarding Scofield’s teachings, Petitioner submits that “Scofield discloses analyzing periodic position information to determine ‘how (e.g., by what geographic path, trail, or avenue) a mobile device user is traveling between locations.’” Pet. 12 (citing Ex. 1007, 5:64–67, 5:55–6:10, 6:14–36; Ex. 1002 ¶ 272).

Based on Creemer’s or Scofield’s teachings, Petitioner reasons that a

POSITA would have incorporated the recited receiving and determining, as taught by Creemer or Scofield, in furtherance of execution of [Felt’s] rules, to increase precision, consider user circumstances, refine information and visibility, and/or otherwise improve accuracy, reduce noise, and/or promote efficiency in targeted communications.

Pet. 12. (citing Ex. 1002 ¶ 273).

Patent Owner argues that there is no motivation to combine Felt with Creemer or Scofield. *See* PO Resp. 49–52.

Regarding Creemer’s teachings, Patent Owner submits that “a POSITA looking at speed and direction would utilize Felt’s teachings and would have no reason to review Creemer . . . to determine how to make use of speed and direction.” PO Resp. 50.

Regarding Scofield, Patent Owner argues, “[a]fter hunting through the multitude of string cites, there is nothing Patent Owner could find in Scofield that mentions or insinuates how to ‘increase accuracy, reduce noise and/or otherwise promote efficiency in targeted communications’.” PO Resp. 51–52.

We disagree with Patent Owner’s argument. Patent Owner’s argument appears premised on a position that the cited art, including Creemer and Scofield, must expressly teach increasing accuracy or promoting efficiency in its communications (*see, e.g.*, PO Resp. 51–52), yet this is not the standard for showing obviousness. *See KSR*, 550 U.S. at 418–19 (holding an express teaching, suggestion, or motivation in the prior art is not a requirement for an obviousness determination).

Rather, we find that Petitioner has shown sufficiently that a skilled artisan would have combined the teachings of Felt with Creemer and would have combined the teachings of Felt with Scofield to arrive at the claimed invention. In regard to the combination with Creemer, we credit the uncontroverted testimony of Dr. Goldberg that

Creemer illustrates [Felt’s] speed/direction, proximity, and/or manner of travel as course of travel. A POSITA would have been motivated to implement Creemer’s more complete consideration of the consumer’s path of travel into [Felt] to promote precision, consideration of user circumstances,

refinement of information, and/or otherwise to improve accuracy, reduce noise, and/or promote efficiency in targeted communications.

Ex. 1002 ¶ 252 (citing Ex. 1006 ¶¶ 10–15, code (57)).

We further credit Dr. Goldberg’s uncontroverted testimony that Scofield discloses course of travel by its determination of traffic patterns, navigational paths, and/or user trails for content. Ex. 1002 ¶ 253 (citations omitted). We agree with and credit Dr. Goldberg’s testimony that Scofield applies the user’s path, or trail, to determine desirable advertisements. *See id.* ¶ 254 (citing Ex. 1007, 4:43–55, 5:17–32). We further credit Dr. Goldberg’s testimony that Scofield “expansively considers such paths as consumer courses of travel including the user’s movements.” *Id.* ¶ 255.

Having reviewed the record, including Dr. Goldberg’s declaration, we find that Dr. Goldberg testifies with reasonable support from Scofield that Scofield discloses analyzing periodic position information to determine “how (e.g., by what geographic path, trail, or avenue) a mobile device user is traveling between locations. . . .

Such periodic information indicates at least first and second locations indicated from the mobile device to the remote system.

a POSITA would have been motivated to incorporate the receiving and determining taught by Creemer and/or Scofield into the system of [Felt] in relation to the execution of the rules, to provide increasing precision, consideration of user circumstances, refinement of information, visibility, and/or otherwise to improve accuracy, reduce noise, and/or promote efficiency in targeted communications.

Ex. 1002 ¶¶ 272–73.

For the reasons above, having weighed the evidence and the uncontroverted testimony of Dr. Goldberg, which we find credible and

supported by the record, Petitioner has demonstrated by a preponderance of the evidence that Felt in combination with Creemer, and Felt in combination with Scofield teaches Elements 1(e) and 1(f). [add a cite to the portions of Goldberg you are referring to]

When further applying Petitioner's contentions based on Felt, as incorporated with Ground 4 from Grounds 1 and 2 by Petitioner, and, as discussed above, Petitioner has shown that, under Ground 4, the combinations of Felt and Creemer, and Felt and Scofield accounts for all the limitations of claim 1 and that a person of ordinary skill in the art would have had reason to combine the teachings of those references in the manner suggested.

4. Claims 2–12

Petitioner asserts that the subject matter of claims 2–12 would have been obvious over Felt in view of Creemer or Scofield and provides a detailed analysis of each of these claims with argument and evidence in support thereof. *See* Pet. 13–20 (addressing claims 2–12). Patent Owner does not raise any arguments directed specifically to these dependent claims. *See* PO Resp. 49–52.

For the reasons above, having reviewed the record, including Patent Owner's arguments and Dr. Goldberg's uncontroverted testimony, Petitioner shows by a preponderance of the evidence that the combination of Felt and Creemer and the combination of Felt and Scofield teaches each limitation of claims 2–12. *See* Pet. 13–20. We adopt Petitioner's arguments and cited evidence as to these claims and limitations as our own determination and basis.

5. *Claims 13–19*

As with Grounds 1 and 2, Petitioner relies primarily on Felt for addressing each of the limitations under Ground 4. *See* Pet. 20–27.

To the extent that Felt does not disclose “its end points as target destinations, or rules for speed/direction, proximity, and/or manner of travel as a particular path towards the target destination as recited,” Petitioner submits that “each of Creemer and Scofield disclose such aspects.” *See* Pet. 24 (citing in part Ex. 1006 ¶¶ 62–64; Ex. 1007, 3:42–47); *see also id.* at 20; *see also, e.g.*, Ex. 1001, 14:7–11 (reciting further the step of specifying at least one of “a target destination” and “a particular path towards the target destination.”). Based on these additional teachings, Petitioner reasons that a skilled artisan would have further modified Felt to incorporate a target destination as a second location, as taught by Creemer and Scofield, for the purpose of improving accuracy and promoting efficiency. *See* Pet. 24 (citing Ex. 1002 ¶¶ 309–310).

Other than arguing that there is no motivation to combine Felt with Creemer or Scofield, Patent Owner does not present arguments addressing the challenge of claims 13–19 as unpatentable over Felt in view of Creemer or Scofield. *See* PO Resp. 49–52.

Creemer teaches “the position and time information from steps 805 and 810 is used to calculate rate-based information such as the user’s rate of travel.” Ex. 1006 ¶ 62. Scofield similarly teaches that its system “may determine one or more other locations from which users travel to a particular other location. For instance, a location L1 may be frequently visited from

location L2.” Ex. 1007, 4:42–45. Based in part on these teachings, Dr. Goldberg testifies that

a POSITA would have been motivated to incorporate the recited specifying target destination as the second location, as taught by one or more of Creemer and Scofield, *to provide precision, consideration of user circumstances, refinement of information, visibility, and/or otherwise to improve accuracy, reduce noise, and/or promote efficiency in targeted communications concerning paths and end points of travel.*

Ex. 1002 ¶ 310 (emphasis added). Petitioner’s motivation to combine Felt with Creemer and Scofield, which includes improving accuracy, and promoting efficiency, is sufficiently articulated and supported by the evidence. *See id.*; *see also* Pet. 24 (providing the same reasoning).

For the reasons discussed above, having reviewed the record, including Patent Owner’s arguments and Dr. Goldberg’s uncontroverted testimony, Petitioner shows by a preponderance of the evidence that the combination of Felt and Creemer and the combination of Felt and Scofield teach each limitation of claims 13–19. Petitioner has shown by a preponderance of the evidence that claims 13–19 are unpatentable over Felt in view of Creemer or Scofield under Ground 4.

6. Claims 20–23

As explained above under Grounds 1 and 2, Petitioner fails to show that Felt, alone, satisfies Element 20(g) of independent claim 20. *See supra* § II.D.6.

Under Ground 4, Petitioner does not rely on Creemer or Scofield to address Element 20(g). *See* Pet. 26–30. As such, Petitioner’s reliance on

Creemer and Scofield does not remedy Petitioner's failure to show that Felt satisfies Element 20(g).

Accordingly, the Petition fails to demonstrate that Felt in view of Creemer or Scofield renders obvious independent claim 20 or its dependent claims 21–23 for the same reasons discussed above in regard to Grounds 1 and 2.

7. Summary of Ground 4

Petitioner has shown that the combination of Felt and Scofield and the combination of Felt and Creemer each accounts for all the limitations of claims 1–19 and that a person of ordinary skill in the art would have had reason to combine the teachings of those references in the manner suggested. Petitioner has not shown, however, that the combination of Felt and Scofield or the combination of Felt and Creemer accounts for each of the limitations of claims 20–23.

F. Grounds 3 and 5: Obvious over Felt and Geer (Ground 3) and Felt, Geer, and Scofield or Creemer (Ground 5)

Petitioner submits that claims 13–19 would have been obvious over Felt and Geer (Ground 3) and Felt in view of Geer and Scofield or Creemer (Ground 5). Pet. 34.

1. Geer

Geer is a U.S. Patent Publication titled “Geofenced Event-Based Fan Networking Methods.” Ex. 1005, code (54). Geer discloses that its “invention is a fan networking system (FNS), available through a software application, executing on fans’ portable smart devices for an event to be held

in a venue.” *Id.* at code (57). Geer further discloses that a “FNS may offer event-customized services to fans, such as messaging, fan groups, mementos, coupons, ‘friends’, and contests.” *Id.* Geer explains that its “level of services might depend on whether a fan is attending; timing (pre-, during, post-performance); for a competitive event, whether the fan affiliates with the home or away team; and the category of fan (e.g., audience, management, performer).” *Id.*

2. *Independent Claim 13*

Under Grounds 3 and 5, Petitioner submits that claim 13 would have been obvious over Felt in view of Geer (Ground 3) and Felt in view of Creemer or Scofield (Ground 5), “to the extent that [Felt does] not expressly or elaborately disclose a direct response to the first indication as recited, in the area of location-based communications.” Pet. 34; *see also* Ex. 1001, 39:66–40:3 (reciting, “receiving a first indication that the consumer is within a radius of the geolocation” and “tracking the consumer in response to receiving the first indication to determine whether the consumer has performed the at least one action”).

Petitioner submits that “Geer discloses responsive activation of high-resolution tracking (‘HIRES’).” Pet. 34. Petitioner further submits that “Geer teaches to activate HIRES when a user crosses a geofence boundary for increased precision near the location of interest, while reducing phone battery consumption farther away from that location.” *Id.* (citing in part Ex. 1005 ¶ 64). Petitioner reasons that a “POSITA would have incorporated such location-responsive user tracking in [Felt] to adjust resolution

appropriately, to reduce data loads, and/or to save power consumption.” *Id.* at 35 (citing Ex. 1002 ¶¶ 337–338).

Patent Owner argues that the “a POSITA would not have been motivated to combine the teachings of Felt with Geer to arrive at the claimed invention.” PO Resp. 48. Patent Owner contends that the

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 Felt Indeed, Geer deals with a situation where like-minded people are already at an event, while Felt attempts to influence purchases; there is no reason to combine the references.

Id. at 47 (citing Ex. 1002 ¶ 338).

In Petitioner’s Reply, Petitioner responds, “Geer’s geolocation-based communications system initiates high-resolution (‘HIRES’) tracking *in response* to the consumer (user-fan) entering a boundary.” Pet Reply 19. Petitioner further explains that “Geer’s system receives GPS indication of user presence within OZ, and Geer responds by activating HIRES tracking to increase precision.” *Id.* at 21.

We agree with Patent Owner that the Petition fails to explain the proposed combination and how that combination would address Elements 13(c) and 13(d).

Specifically, it is not clear from the Petition how the teachings of Geer are being used to improve upon Felt’s system. Petitioner reasons that a “POSITA would have incorporated such location-responsive user tracking in [Felt] to adjust resolution appropriately, to reduce data loads, and/or to save power consumption” (Pet. 35), yet the Petition does not address how the proposed combination would satisfy the relevant claim limitation, which

requires, “tracking the consumer in response to receiving the first indication to determine whether the consumer has performed the at least one action” (*id.* at vi (Element 13(d))). Based on our review of the Petition, it is unclear how Felt is being modified based on Geer’s teachings to satisfy the claim limitation. *See id.* at 34–35.

Accordingly, Petitioner has failed to show, by a preponderance of the evidence, that Felt in view of Geer (Ground 3) or Felt in view of Geer and Creemer or Scofield (Ground 5) satisfies Element 13(d) and has failed to show that independent claim 13 is unpatentable under these grounds.

3. *Dependent Claims 14–19*

For the same reasons discussed above regarding why Felt in view of Geer (Ground 3) and Felt in view of Geer and Creemer or Scofield (Ground 5) fails to renders obvious independent claim 13, the Petition fails to demonstrate, by a preponderance of the evidence, that dependent claims 14–19 would have been obvious under these grounds.

4. *Summary of Grounds 3 and 5*

As discussed above, we found that claims 13–19 are anticipated by Felt (Ground 1) and would have been obvious over Felt (Ground 2). *See supra* § II.D.8. Petitioner has failed to show, however, by a preponderance of the evidence, that any of claims 13–19 would have been obvious based on Petitioner’s alternative arguments further relying on *Geer*. Accordingly, Petitioner has failed to show, by a preponderance of the evidence, that claims 13–19 would have been obvious over the asserted combinations of

Felt and Geer (Ground 3) or Felt in view of Geer and Scofield or Creemer (Ground 5).

G. Ground 6

Petitioner submits that claims 1–23 are unpatentable over Adharapurapu in view of Felt. Pet. 1, 35–65.

Petitioner shows that the combination of Adharapurapu and Felt teaches each of the limitations of claims 1–23. Pet. 35–65. We adopt Petitioner’s analysis as our own findings and conclusions as to these claims. *Id.* Consistent with Petitioner’s discussion in the Petition, we begin with an analysis of Petitioner’s contentions concerning each of the limitations of independent claims 1, 13, and 20. We address why we disagree with Patent Owner’s arguments in opposition, which only focus on the independent claims. *Cf In re NuVasive, Inc.*, 841 F.3d 966, 974 (Fed. Cir. 2016) (“The Board, having found the only disputed limitations together in one reference, was not required to address undisputed matters”); *see also* PO Resp. 53–59 (arguing Petitioner’s contentions of independent claims 1, 13, and 20, only).

1. Adharapurapu (Ex. 1008)

Adharapurapu, which Petitioner refers to as Alcatel in the Petition (*see, e.g.*, Pet. 1), is a published European Patent Application titled “Content Delivery Based on Direction of Mobility” (Ex. 1008, code (54)).

Adharapurapu purports to disclose a “system capable of delivering content to a mobile device based on the direction of mobility of the device.”

Ex. 1008, code (57). Adharapurapu’s “system keeps track of the direction of travel of the mobile device through locations of predefined tracker base

stations passed by the mobile device.” *Id.* We reproduce Figure 1 of Adharapurapu, below:

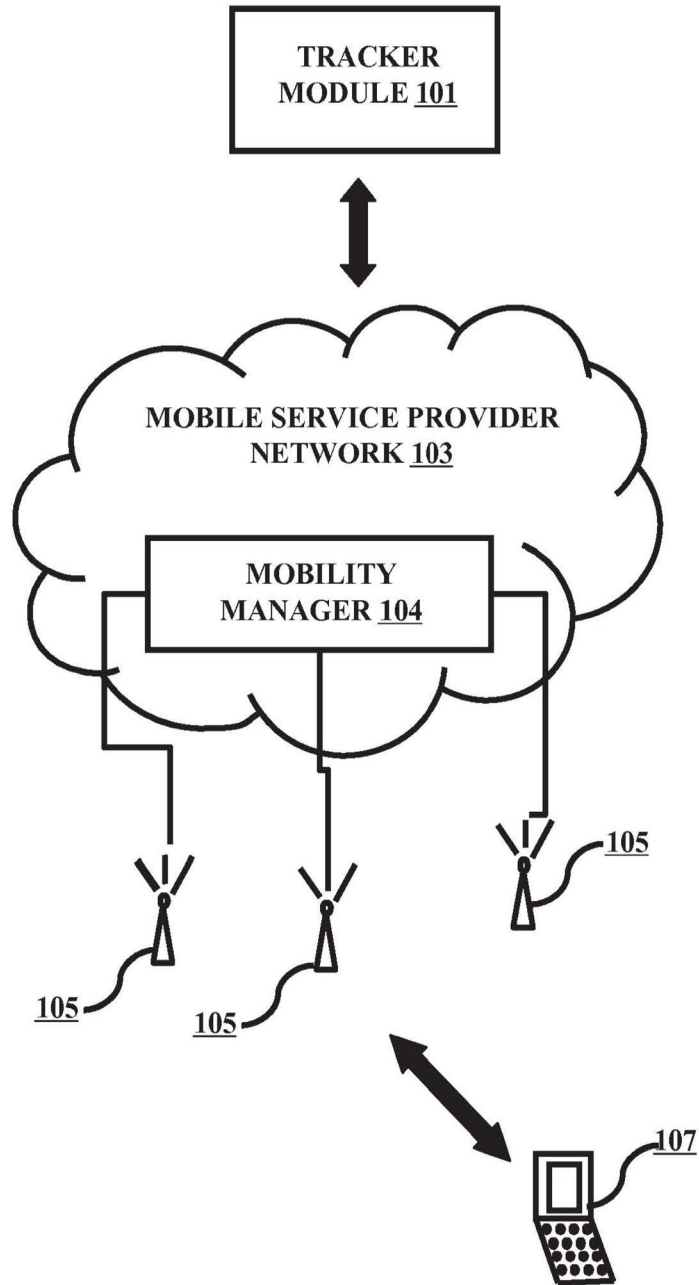


FIG. 1

Figure 1, reproduced above, “is a schematic illustration of a telecommunication network in accordance with an embodiment of

[Adharapurapu's] invention.” *Id.* ¶ 10. Specifically, Figure 1 depicts tracker module 101 in communication with mobile device 107 through mobile service provider network 103. *Id.* ¶ 15. Figure 1 also shows mobile provider network 103 with mobility manager 104, which keeps track of the location and direction of each mobile device 107 through base stations 105. *See id.* ¶¶ 15, 21.

2. Independent Claim 1

- a. *Element 1(a) “specifying a content distribution campaign, the content distribution campaign comprising; [1(a)(i)] a geolocation, and [1(a)(ii)] media content associated with the geolocation”*

Petitioner submits that Adharapurapu discloses Element 1(a), explaining that “[Adharapurapu’s] base stations concern relevant geolocations of interest, such as restaurants.” Pet. 35–36 (citing Ex. 1008 ¶¶ 15, 16, 21; Ex. 1002 ¶ 339). Petitioner further submits that Adharapurapu discloses media content including advertisements, the weather, and traffic. *Id.* at 36. Dr. Goldberg testifies that a

POSITA would understand that [Adharapurapu’s] disclosure indicates that the term “geolocation” is synonymous with “location”, as [Adharapurapu] discusses locations in the context of “geographical” locations. . . . [and notes that Adharapurapu] discloses that rules are defined for content delivery based on requirements from the advertiser/publishers.

Ex. 1002 ¶ 339 (citing Ex. 1008 ¶¶ 17, 19–22). Dr. Goldberg explains that Adharapurapu’s base stations include geolocations of interest, such as restaurants, gift shops, or cities of interest in Adharapurapu’s examples. *Id.* (citing Ex. 1008 ¶¶ 15, 16, 21).

Patent Owner does not dispute Petitioner's assertions or challenge Dr. Goldberg's testimony that Adharapurapu discloses Element 1(a). *See* PO Resp. 53–59; *see also* PO Sur-reply 11–13.

For the reasons above, having weighed the evidence and the uncontroverted testimony of Dr. Goldberg, which we find credible and supported by the record, Petitioner has demonstrated by a preponderance of the evidence that Adharapurapu discloses Element 1(a).

b. Element 1(b) “specifying a plurality of rules for the content distribution campaign, wherein specifying the plurality of rules comprises: 1(b)(i): specifying a first rule corresponding to a period of time, 1(b)(ii): specifying a second rule corresponding to at least one element of profile data associated with a consumer, and 1(b)(iii): specifying a third rule corresponding to a course of travel associated with the consumer”

Petitioner submits that Adharapurapu discloses Element 1(b). Pet. 36.

As for the “first rule corresponding to a period of time” and the “third rule corresponding to a course of travel,” Petitioner explains that Adharapurapu

indicates time and course of travel among its criteria including “0900-1800 hrs,” “0800-2130 hrs,” and “0000-2359 hrs,” and courses of travel such as along base stations “A->D->C,” “I->E OR I->G AND NOT (H->G),” “A->B->E->F->I.

Id. (quoting Ex. 1008 ¶¶ 20–22; citing Ex. 1002 ¶ 340). Dr. Goldberg testifies that

[Adharapurapu] discloses its rules to include period of time and course of travel, as recited in claim 1. [Adharapurapu] teaches in one example that its rules are “based on the days specified, time specified[,] and the location of the tracker base stations near the road.” . . . [And that in other examples, Adharapurapu] indicates time and course of travel among its

criteria including “0900-1800 hrs,” “0800-2130 hrs,” and “0000-2359 hrs,” and courses of travel such as along base stations “A->D->C,” “I->E OR I->G AND NOT (H->G),” “A->B->E->F->I.”

Ex. 1002 ¶ 340 (citing Ex. 1008 ¶¶ 17, 20–22).

As for the “second rule corresponding to at least one element of profile data associated with a consumer,” Petitioner submits that Adharapurapu discloses this element through its teaching of treating subscribers and non-subscribers differently. *See* Pet. 37 (citing Ex. 1008 ¶¶ 18–22). Petitioner explains that in Adharapurapu, “subscriptions are checked and non-subscribers are not activated for content delivery.” *Id.* (citing Ex. 1008 ¶¶ 15, 22; Ex. 1002 ¶ 341). Dr. Goldberg testifies that

[Adharapurapu] utilizes profile data and suggests users treated differently by their different characteristics. This can include, for example, subscribers vs. nonsubscribers (*e.g.*, [Adharapurapu] ¶¶[0018]-[0022]). . . . As described in [Adharapurapu’s] exemplary walkthrough, subscriptions are checked and non-subscribers are not activated for content delivery.

Ex. 1002 ¶ 341 (citing Ex. 1008 ¶ 18–22).

Patent Owner does not dispute Petitioner’s assertions or challenge Dr. Goldberg’s testimony that Adharapurapu discloses Element 1(b). *See* PO Resp. 53–59; *see also* PO Sur-reply 11–13.

For the reasons above, having weighed the evidence and the uncontroverted testimony of Dr. Goldberg, which we find credible and supported by the record, Petitioner has demonstrated by a preponderance of the evidence that Adharapurapu *discloses* Element 1(b).

In the alternative, in the event that Adharapurapu does not disclose Element 1(b), Petitioner reasons that a

POSITA would have incorporated rules concerning at least one element of profile data associated with a consumer, as taught by [Felt], by [Adharapurapu's] suggestion and/or to tailor content to the consumer, to increase accuracy, reduce noise, and/or otherwise to improve communications based on user specific information.

Pet. 38 (citing Ex. 1002 ¶ 343).

As to the proposed combination of Felt and Adharapurapu, Patent Owner argues that the Petition fails to establish a motivation to combine. PO Resp. 53. Patent Owner explains that Petitioner's "generalize[d] statement provides no support for motivation to combine." *Id.* at 54 (citing *Delta, LLC v. Cisco Sys.*, 942 F.3d 1352, 1359 (Fed. Cir. 2019)).

In support of Patent Owner's argument, Patent Owner contends that "Adharapurapu is using old and entirely different technology to track mobility service, and not the location of the of the consumer within a radius of the geolocation as required by the claims." PO Resp. 55 (citing Ex. 1008 ¶ 54). Patent Owner argues,

Adharapurapu states that it can be applied in a GSM network. As pointed out in "The GSM System for Mobile Communication" book, . . . in Figure 1.1 cellular coverage is overlapping. There is no geofencing because a mobile device can be covered by two or more cells at the same time and no evidence has been provided by Petitioner that a mobile device will always be assigned the same base station. The point of geofencing as claimed is to have a boundary and not overlapping cells. Additionally, propagation paths affect to which base stations a mobile device may be connected.

Id. at 56 (citing Ex. 2002, Fig. 9.8, 579).

Patent Owner further argues,

The 3GPP cellular standard, TS 45.008 V5.11.0, Technical Specification Group GSM/EDGE Radio Access Network; Radio subsystem link control (Release 5)(June 2003),

. . . further identifies the shortcomings of Adharapurapu's approach of tracking mobility service. Cells may be selected based upon being suitable. TS 45.008 teaches that an MS [Mobile Station] that has selected a GSM cell for service ('camped on a cell of the first RAT') is to follow the procedures of section 6.6.5 to possibly select an identified UTRAN cell ('cell of a second RAT') for camping if the UTRAN cell is 'suitable' to select for service ('camping').

Section 6.6 of TS 45.008, titled "Measurements for Cell Reselection," states that "[u]pon completion of cell selection and when starting the cell reselection tasks, the MS shall synchronize to and read the BCCH information for the 6 strongest non-serving carriers (in the BA) as quickly as possible" and that "[f]or multi band MSs the strongest non-serving carriers may belong to different frequency bands." . . . Section 6.6.4, titled "Measurements on cells of other radio access technologies" explains that "[f]or a multi-RAT MS, cells or frequencies with other radio access technologies may be included in 3G Cell Reselection list." . . . Section 6.6.5, titled "Algorithm for cell re-selection from GSM to UTRAN," further explains that the UE "shall . . . reselect a suitable (see 3GPP TS 25.304) UTRAN cell" if the measured parameters exceed those of the serving cell and all the suitable non-serving cells and that "[t]he parameters required to determine if the UTRAN cell is suitable are broadcast on BCCH of the UTRAN cell."

PO Resp. 56–57 (citing Ex. 2003, 20, 22)

Based on these summaries of Exhibits 2002 and 2003, Patent Owner concludes that "even if a mobile device takes the same path through the same cell sites, the use of different services, such as a service requiring a UTRAN cell, would result in different cells being used." PO Resp. 57.

Patent Owner further contends that

Adharapurapu teaches using history of a person's travel, not determine course of travel, but rather, to predict whether the next cellular area (*i.e.*, base station) will be accessed next by a mobile subscriber. The approaches of using geofencing in Felt

is opposed to using cellular coverage of Adharapurapu. Further, the approach of Adharapurapu requires the same historic cellular coverage areas to be recorded to be able to access the history of previous travels to predict where a mobile device is going. A person skilled in the art would understand that cellular coverage overlaps and cells are not simply selected because of a mobile's device location.

PO Resp. 57–58.

Petitioner responds that “Patent Owner jumbles confusing or irrelevant arguments concerning Grounds 6” Pet. Reply 25. Petitioner contends that Patent Owner’s “[r]eliance on [Exhibits 2002 and 2003] is flawed where neither is self-explanatory.” *Id.* at 28. Petitioner argues that “Patent Owner’s vast extrapolation from these exhibits is undemonstrated (omitting any expert analysis).” *Id.* at 29. Petitioner cites to the supplemental testimony of Dr. Goldberg in support of its position. *See id.* at 28–29 (citing Ex. 1009 ¶¶ 5, 6).

In its Sur-reply, Patent Owner criticizes Dr. Goldberg’s supplemental testimony, arguing that “[w]hat needs to be highlighted regarding Petitioner’s second expert report (Ex. 1009) is that Geofencing, as described in the Felt publication, is independent of cellular base stations and can work independently of a cellular provider.” PO Sur-reply 12.

Patent Owner’s arguments are confusing and the reliance on Exhibits 2002 and 2003 are irrelevant. *See* Pet. Reply 25 (arguing the same). We credit Dr. Goldberg’s uncontroverted testimony that these exhibits do not support Patent Owner’s argument. *See, e.g.*, Ex. 1009 ¶¶ 2, 12.

Dr. Goldberg testifies that he has reviewed Exhibits 2002 and 2003. Ex. 1009 ¶ 2. Dr. Goldberg provides credible testimony that Patent Owner’s characterization of the evidence and art is “untrue” and that the point that

Patent Owner attempts to make is “irrelevant to the issue of whether Adharapurapu in view of Felt (and alternatively with Geer) renders the claims obvious.” *See id.* Having weighed the evidence and uncontroverted testimony of Dr. Goldberg, we credit Dr. Goldberg’s testimony that Patent Owner’s argument based on Exhibits 2002 and 2003 are premised on a “false illustration and overstates the issues.” *See id.* ¶ 6 (“Patent Owner has argued in reliance upon Exhibit 2002 that overlapping cells causes the selected cellular stations to vary, and similarly in reliance on Exhibit 2003 that selection between different performance levels, such as GSM vs. UTRAN can cause selected stations to vary.”); *see also id.* ¶ 12 (“I disagree that Exhibits 2002 and 2003 can support that Adharapurapu would be incapable of meeting the first and second location aspects of claim 1, such as in elements 1(e) & (f).”). We further credit the testimony of Dr. Goldberg that

A POSITA would expect the same cellular base stations to be selected under ordinary circumstances for a given course of travel even taken multiple times. Even presuming that variability would allow the same course of travel to select an overlapping base station under particular conditions, POSITA would understand that this would not be the normal case. Thus, *the distinction about overlapping cellular coverage areas is irrelevant.* Even assuming that Adharapurapu was required to use the GSM/UTRAN technology implemented according to Exhibits 2002 and/or 2003, Adharapurapu’s design (in view of Felt, and alternatively with Geer) would still meet the claim terms (including elements 1(e) & (f)) as I discussed in my earlier declaration.

Ex. 1009 ¶ 12 (emphasis added).

Turning to Patent Owner’s argument that there is insufficient motivation to combine Adharapurapu with Felt, we disagree. *See PO Resp.*

53. While Petitioner must reasonably show that “there was an apparent reason to combine the known elements in the fashion claimed” (*see KSR*, 550 U.S. at 418), the apparent reason to combine references need not come from the references themselves (*see DyStar Testilfarben GmbH & Co. Deutschland KG v. C.H. Patrick Co.*, 464 F.3d 1356, 1368 (Fed. Cir. 2006)). Rather, the proper inquiry is whether Petitioner has articulated adequate reasoning based on a rational underpinning to explain why a person of ordinary skill in the art would have been led to combine Adharapurapu and Felt. *See KSR*, 550 U.S. at 418.

Here, Petitioner has demonstrated by a preponderance of the evidence that a skilled artisan would have had to reasons to modify Adharapurapu by incorporating rules that consider, for example, a user’s age, income, and education, as taught by Felt (*see, e.g.*, Ex. 1004 ¶ 48), for the purpose of tailoring advertising content to that user (*see* Pet. 38). We credit Dr. Goldberg’s testimony that Felt discloses specifying a rule corresponding to user profile data, such as, for example, “age, ethnicity, employment status, income, education, languages, URLs, cookies, identity.” Ex. 1002 ¶ 342 (quoting Ex. 1004 ¶ 48). We further credit Dr. Goldberg’s testimony that “a POSITA would have been motivated to incorporate rules concerning at least one element of profile data associated with a consumer, as taught by [Felt], by [Adharapurapu’s] guidance, and/or to tailor content to the consumer, to increase accuracy, reduce noise, and/or otherwise to improve communications based on user specific information.” Ex. 1002 ¶ 343. Indeed, such a modification would have improved Adharapurapu’s system by providing more relevant advertising to the user. For example, by considering a user’s age, one of Adharapurapu’s restaurant advertisements

may focus on restaurants that cater to children or the elderly. *See* Ex. 1008 ¶ 21 (“With the location information, the direction of the travel is ascertained and content information related to restaurant R1 can be sent to the mobile device 107”); *see also* Ex. 1004 ¶ 48 (“The user profile may also include . . . various demographic data such as age.”).

As explained above, Petitioner has demonstrated by a preponderance of the evidence that Adharapurapu discloses Element 1(b).

Furthermore, for the reasons above, having weighed the evidence and the uncontroverted testimony of Dr. Goldberg, which we find credible and supported by the record, Petitioner has *also* demonstrated by a preponderance of the evidence that Adharapurapu, as modified based on Felt’s teachings, also satisfies Element 1(b).

c. Element 1(c) “receiving a first indication that the consumer is at a first location within a radius of the geolocation”

Petitioner submits that Adharapurapu discloses Element 1(c). Pet. 38. Petitioner explains that the consumer being within Adharapurapu’s radius of base station A receives such indication by the system. *Id.* at 39 (citing Ex. 1008 ¶ 20, Ex. 1002 ¶ 344). Petitioner further explains that, in Adharapurapu, the “presence within the base station coverage defines presence within the radius of the location of interest such as a restaurant.” *Id.* (citing Ex. 1008 ¶ 20).

Dr. Goldberg testifies that

A POSITA would understand that pinging the base station or receiving messages from the base station constitute receiving location information, identifying consumers and identifying them as targets via their mobile devices, and determining the course of travel. A POSITA would appreciate

that a radio frequency coverage area of a base station commonly includes a coverage area defined by a circle having a radius. For example, I note the consumer being within [Adharapurapu's] radius of base station A receives such an indication by the system. . . . A presence within the base station coverage defines presence within the radius of the location of interest such as a restaurant.

Ex. 1002 ¶ 344 (citing Adharapurapu ¶ 20).

Patent Owner does not dispute Petitioner's assertions or challenge Dr. Goldberg's testimony that Adharapurapu discloses Element 1(c). *See* PO Resp. 53–59; *see also* PO Sur-reply 11–13.

For the reasons above, having weighed the evidence and the uncontroverted testimony of Dr. Goldberg, which we find credible and supported by the record, Petitioner has demonstrated by a preponderance of the evidence that Adharapurapu *discloses* Element 1(c).

In the alternative, and to the extent that Adharapurapu fails to disclose Element 1(c), Petitioner relies on Felt's teaching of a radius to provide appropriate range of interest. Pet. 39. (citing Ex. 1004 ¶ 36). Petitioner reasons that a "POSITA would have incorporated receiving indication as recited, as taught by [Felt], to assist in identifying consumer presence in the area of interest, and/or at [Adharapurapu's] suggestion." *Id.* (citing Ex. 1002 ¶ 345).

Dr. Goldberg testifies that

a POSITA would have been motivated to incorporate receiving an indication, as taught by [Felt], to assist in identifying consumer presence in the area of interest, and/or in [Adharapurapu]. Even further, it is my opinion that, to the extent that [Adharapurapu] does not disclose the limitation, a POSITA, such as, for example, myself, would have appreciated that the system of [Adharapurapu] must receive some type of "indication", such as instructions, a GPS ping on an internal

map, or the like, when the mobile device 107 reaches the base station 105, either from the device or from the base station. Otherwise, the system would not be able to actively update the advertising content based on the time and location.

Ex. 1002 ¶ 345.

Other than those arguments addressed above in connection with Element 1(b), Patent Owner does not dispute Petitioner’s assertions or challenge Dr. Goldberg’s testimony as to whether it would have been obvious to combine Adharapurapu’s teachings with Felt’s teachings to satisfy Element 1(c) . *See* PO Resp. 53–59; *see also* PO Sur-reply 11–13.

As explained above, Petitioner has demonstrated by a preponderance of the evidence that Adharapurapu discloses Element 1(c).

Furthermore, for the reasons above, having weighed the evidence and the uncontroverted testimony of Dr. Goldberg, which we find credible and supported by the record, Petitioner has *also* demonstrated by a preponderance of the evidence that Adharapurapu, as modified based on Felt’s teachings, satisfies Element 1(c).

d. Element 1(d) “assessing, in response to the first indication, the at least one element of profile data associated with the consumer”

Petitioner submits that Adharapurapu discloses Element 1(d). Pet. 39. Petitioner explains that Adharapurapu “expressly checks for user subscription when the mobile device is detected by the tracker base station.” *Id.* (citing Ex. 1008 ¶ 22). Dr. Goldberg testifies in support of the same. *See* Ex. 1002 ¶ 346.

Patent Owner does not dispute Petitioner’s assertions or challenge Dr. Goldberg’s testimony that Adharapurapu discloses Element 1(d). *See* PO Resp. 53–59; *see also* PO Sur-reply 11–13.

For the reasons above, having weighed the evidence and the uncontroverted testimony of Dr. Goldberg, which we find credible and supported by the record, Petitioner has demonstrated by a preponderance of the evidence that Adharapurapu *discloses* Element 1(d).

In the alternative, and to the extent that Adharapurapu does not disclose Element 1(d), Petitioner reasons that, based on Felt’s teaching of attributes such as age, ethnicity, employment status, income, and education, a “POSITA would have implemented assessing as recited in claim 1 in conformance with [Adharapurapu’s] architecture and/or to allow updating, divided process, and/or as hierarchical design in tailored content.” *Id.* at 39 (citing Ex. 1002 ¶ 346).

Dr. Goldberg testifies that

[I]n incorporating elements of profile data further into [Adharapurapu], attributes such as age, ethnicity, employment status, income, education, etc. as in [Felt], in my opinion a POSITA would have implemented assessing in claim 1 in conformance with [Adharapurapu’s] architecture and/or to allow updating, divided process, and/or as hierarchical design in tailored content. It is my opinion that, to the extent it is contended that [Adharapurapu] does not disclose responsive assessment, a POSITA, such as, for example, myself, would have appreciated that, for example, the system of [Adharapurapu] furthers the assessment of whether to deliver content once an indication is received from an exemplary first location of a first base station that the mobile device 107 is in that area. In other words, the assessment of profile data, and thus the determination of whether to deliver content to the mobile device 107, must be responsive to the mobile device 107 being located at the first base station. In my opinion, this is true because if the user were to change his or her profile settings immediately after reaching location 1, [Adharapurapu’s] disclosure makes clear that such a change would be taken into account for delivering content. As such, [Adharapurapu] makes

clear that consideration of user profile data would occur in response to an indication that the user is located at the first base station.

Ex. 1002 ¶ 346 (citing Ex. 1008 ¶¶ 18–22).

Other than those arguments addressed above in connection with Element 1(b), Patent Owner does not dispute Petitioner’s assertions or challenge Dr. Goldberg’s testimony as to whether it would have been obvious to combine Adharapurapu’s teachings with Felt’s teachings to satisfy Element 1(d) . *See* PO Resp. 53–59; *see also* PO Sur-reply 11–13.

As explained above, Petitioner has demonstrated by a preponderance of the evidence that Adharapurapu discloses Element 1(d).

Furthermore, for the reasons above, having weighed the evidence and the uncontroverted testimony of Dr. Goldberg, which we find credible and supported by the record, Petitioner has *also* demonstrated by a preponderance of the evidence that Adharapurapu, as modified based on Felt’s teachings, satisfies Element 1(d).

e. Element 1(e) “receiving a second indication that the consumer is at a second location” and Element 1(f) “determining the course of travel based, at least in part, on an analysis of the first location and the second location”

Petitioner submits that Adharapurapu discloses Elements 1(e) and 1(f). Pet. 40. Petitioner cites to Adharapurapu’s identification of courses of travel such as along base stations “A->D->C,” “I->E OR I->G AND NOT (H->G),” “A->B->E->F->I.” *Id.* (quoting Ex. 1008 ¶¶ 20–22; Ex. 1002 ¶ 347. Petitioner explains that comparing Adharapurapu’s indication of station D to station A, Adharapurapu determines the course of travel

between those stations, accordingly. *Id.* (citing Ex. 1008 ¶¶ 17, 20–22; Ex. 1002 ¶ 347).

Dr. Goldberg testifies that

a POSITA would have appreciated [Adharapurapu’s] location tracking system, using GPS, to disclose comparison of discrete locations indicating course of travel, or would have implemented the same as application of known techniques to yield predictable results. Specifically, I understand that, to the extent [Adharapurapu] does not disclose its tracking to include comparison of first and second locations, a POSITA would have appreciated [Adharapurapu’s] implicit disclosure of direction and location tracking via the use of known technologies such as GPS to disclose this detail. A POSITA would have appreciated that tracking technologies commonly use GPS to compare discrete location point differences to determine course such as by speed and direction. Specifically, such systems will utilize the coordinates of a moving object at a first point and the coordinates of the moving object at a second point to determine a difference between the coordinates, thus indicating the distance traveled as well as the direction of travel. Nevertheless, such implementations would have been implemented in [Adharapurapu] as application of known techniques for predictable results, as suggested by [Adharapurapu] itself in applying location/proximity tracking, such as by 3G/4G, GPS or similar technologies.

Ex. 1002 ¶ 347.

Although Patent Owner argues that “Felt does not teach claim elements 1(e) and 1(f)” (PO Resp. 54), Patent Owner does not dispute Petitioner’s assertions or challenge Dr. Goldberg’s testimony that *Adharapurapu discloses* Elements 1(e) and 1(f). *See* PO Resp. 53–59; *see also* PO Sur-reply 11–13.

For the reasons above, having weighed the evidence and the uncontroverted testimony of Dr. Goldberg, which we find credible and

supported by the record, Petitioner has demonstrated by a preponderance of the evidence that Adharapurapu discloses Elements 1(e) and 1(f).

f. Element 1(g) “establishing that the consumer is eligible for the content distribution campaign when the plurality of rules is satisfied

Petitioner submits that Adharapurapu discloses Element 1(g). Pet. 40. Petitioner explains that Adharapurapu establishes that the consumer should receive certain corresponding content in response to execution of its rules based on location. *Id.* (citing Ex. 1008 ¶ 19). Petitioner further explains that Adharapurapu “confirms by walkthrough that meeting requirements for subscription and course of travel can establish consumer eligibility and allow available relevant content to be sent to the consumer.” *Id.* (citing Ex. 1008 ¶ 22; Ex. 1002 ¶ 348).

Dr. Goldberg testifies that Adharapurapu “teaches that a consumer’s eligibility at least includes satisfying a location-based rule.” Ex. 1002 ¶ 348 (citing Ex. 1008 ¶¶ 19–21). Dr. Goldberg further testifies that Adharapurapu “also discloses that meeting requirements for subscription and course of travel can establish consumer eligibility and allow available relevant content to be sent to the consumer.” *Id.* (citing Ex. 1008 ¶¶ 15–22).

Patent Owner does not dispute Petitioner’s assertions or challenge Dr. Goldberg’s testimony that Adharapurapu discloses Element 1(g). *See* PO Resp. 53–59; *see also* PO Sur-reply 11–13.

For the reasons above, having weighed the evidence and the uncontroverted testimony of Dr. Goldberg, which we find credible and supported by the record, Petitioner has demonstrated by a preponderance of the evidence that Adharapurapu discloses Element 1(g).

g. Summary of Claim 1

Petitioner has shown that the combination of Adharapurapu and Felt accounts for all the limitations of claim 1 and that a person of ordinary skill in the art would have had reason to combine the teachings of those references in the manner suggested.

3. Independent Claims 13 and 20

Petitioner shows that the combination of Adharapurapu and Felt teaches each of the limitations of independent claims 13 and 20. *See* Pet. 48–53, 58–63. We adopt Petitioner’s analysis as our own findings and conclusions as to these claims. *Id.*

In addition to Patent Owner’s argument attacking the combinability of Adharapurapu and Felt (*see* PO Resp. 53–59), Patent Owner’s only other argument as to claim 13 is that “Felt does not teach or describe claim elements . . . 13(d) and 20(g)” (PO Resp. 55).

We disagree with Patent Owner’s arguments as Petitioner does not rely on Felt for teaching these limitations. *See* Pet. 51–52 (addressing elements 13(d) and 13(e)), 61–63 (addressing elements 20(e), 20(f), 20(g), and 20(h))¹². Rather, Petitioner relies on Adharapurapu for disclosing the limitations or, in the alternative, the combination of Adharapurapu and Felt. *See id.*

¹² Although the heading in the Petition only lists Element 20(e), and not Elements 20(f)–(h), we understand that this is a typographical error, as Petitioner’s analysis focuses on the limitations recited in Elements 20(e)–20(h). *See* Pet. 61–63; *see also* Ex. 1002 ¶¶ 406–412 (addressing Elements 20(e)–(h) under Ground 6).

For the reasons above, having weighed the evidence and the uncontroverted testimony of Dr. Goldberg, which we find credible and supported by the record, Petitioner has demonstrated by a preponderance of the evidence that that the combination of Adharapurapu and Felt teaches each of the limitations of independent claims 13 and 20.

4. Dependent Claims 2–12, 14–19, and 21–23

Petitioner asserts that the subject matter of dependent claims 2–12, 14–19, and 21–23 would have been obvious over Adharapurapu and Felt and provides a detailed analysis of each of these claims with argument and evidence in support thereof. *See* Pet. 40–48 (addressing claims 2–12), 52–58 (addressing claims 14–19), 63–65 (addressing claims 21–23). Patent Owner does not raise any arguments directed specifically to these dependent claims. *See* PO Resp. 53–59.

Weighing the evidence and uncontroverted testimony of Dr. Goldberg, Petitioner shows by a preponderance of the evidence that Adharapurapu in view of Felt discloses or renders obvious each limitation of claims 2–12, 14–19, and 21–23. We adopt Petitioner’s arguments and cited evidence as to these claims and limitations as our own determination and basis. *See* Pet. 40–48, 52–58, 63–65.

5. Summary of Ground 6

Petitioner has shown, by a preponderance of the evidence, that the combination of Adharapurapu and Felt accounts for all the limitations of claims 1–23 and that a person of ordinary skill in the art would have had reason to combine the teachings of those references in the manner suggested.

H. Ground 7: Obvious over Adharapurapu, Felt, and Geer

Ground 7 challenges claims 13–19 and relies primarily on Adharapurapu, just like Ground 6. *See* Pet. 1. As distinguished from Ground 6, however, Petitioner also relies on the teachings of Geer. *See id.*; *see also id.* at 65–67.

In challenging claims 13–19 as unpatentable over Adharapurapu, Felt, and Geer, Petitioner relies on Geer’s teachings similar to its challenge under Ground 3. *Compare* Pet. 66–67 (Ground 7), *with id.* at 34–35 (Ground 3). Just as with Ground 3, Petitioner relies on Geer for disclosing “activation of high-resolution tracking (“HIRES”) when a user crosses a geofence boundary for increased precision near the location of interest, while reducing phone battery consumption farther away from that location.” Pet. 66; *see also id.* at 34 (finding the same under Ground 3). Based on this alleged teaching, Petitioner reasons that a “POSITA would have incorporated such location-responsive user tracking in [Adharapurapu/Felt] to adjust resolution appropriately, to reduce data loads, and/or to save power consumption.” *Id.* at 66; *see also id.* at 34 (presenting the same reasoning under Ground 3).

Patent Owner argues that Petitioner provides an insufficient motivation to combine. *See* PO Resp. 59.

We agree with Patent Owner.

As with Ground 3, Petitioner fails to explain the proposed combination and how that combination would address Element 13(d). *See supra* § II.F.2.

The Petition fails to sufficiently show how the teachings of Geer are being used to improve upon Adharapurapu’s (or Felt’s) system. Petitioner reasons that a “POSITA would have incorporated such location-responsive

user tracking in [Adharapurapu/Felt] to adjust resolution appropriately, to reduce data loads, and/or to save power consumption” (Pet. 66), yet it is not clear from the Petition how the proposed combination would satisfy the relevant claim limitation, which requires, “tracking the consumer in response to receiving the first indication to determine whether the consumer has performed the at least one action” (*id.* at vi (Element 13(d))). The Petition fails to sufficiently explain how Adharapurapu or Felt is being modified based on Geer’s teachings to satisfy the claim limitation. *See id.* at 66–67.

As discussed above, we found that claims 13–19 would have been obvious over Adharapurapu and Felt (Ground 6). *See supra* § II.G.5. Petitioner has failed to show, however, by a preponderance of the evidence, that any of claims 13–19 would have been obvious based on Petitioner’s alternative arguments further relying on *Geer* in combination with Adharapurapu and Felt (Ground 7). Accordingly, Petitioner has failed to show, by a preponderance of the evidence, that Adharapurapu in view of Felt and Geer satisfies Element 13(d) and, as such, Petitioner has failed to show that independent claim 13, along with dependent claims 14–19, are unpatentable under Ground 7.

III. PETITIONER’S MOTION TO EXCLUDE

Petitioner moves to exclude Exhibits 2002, 2003, and 2004 for lacking relevance. Pet. Mot. 1.¹³ Patent Owner opposes. *See* PO Opp.

The party moving to exclude evidence bears the burden of proving that it is entitled to the relief requested—namely, that the material sought to be excluded is inadmissible under the Federal Rules of Evidence (“FRE”). *See* 37 C.F.R. §§ 42.20(c), 42.62(a).

Petitioner argues that Exhibits 2002, 2003, and 2004 should be excluded because each lacks relevance under FRE 401–403. Pet. Mot. 1. Petitioner submits that “the content of the exhibit[s] and Patent Owner’s arguments which rely on the exhibit[s] are immaterial to the proceeding, and/or the probative value of each exhibit, if any, is substantially outweighed by a danger of one or more of the following: unfair prejudice, confusing the issues, misleading the fact finder, undue delay, or wasting time.” *Id.* Petitioner further argues that “Exhibits 2003 and 2004 each lack[s] proper authentication, and Exhibit 2004 is not actually presented with respect to any of Patent Owner’s arguments and, therefore, lacks evidentiary value.” *Id.*

Patent Owner opposes, arguing that Exhibits 2002, 2003, and 2004 are material to this proceeding. *See* PO Opp. 1. As for Exhibit 2002, Patent Owner argues that it is relevant as it establishes why Petitioner’s understanding of Adharapurapu is wrong and why a POSITA would not

¹³ Exhibit 2002 is a book titled “The GSM System for Mobile Communications.” Exhibit 2003 is a technical specification titled “3rd Generation Partnership Project; Technical Specification Group GSM/EDGE Radio Access Network; Radio subsystem link control (Release 5).” Exhibit 2004 is a declaration of Craig Bishop in earlier *inter partes* review IPR2021-00640.

have combined Adharapurapu with other references. *See id.* at 2. As for Exhibit 2003, Patent Owner argues that this exhibit is relevant in the determination of whether a POSITA would have considered a “GSM approach when dealing with a GPS tracking approach,” which Patent Owner argues is relevant in the analysis of Adharapurapu. *See id.* at 4. As for Exhibit 2004, Patent Owner argues that this exhibit is relevant as it supports a finding that Exhibit 2003 is a publicly-available printed publication. *See id.* at 5.

Regarding Exhibits 2002 and 2003, we deny the motion as Petitioner’s arguments are directed more to the weight that we should give to these exhibits. Even if we agree with Petitioner that Patent Owner’s reliance on these exhibits is confusing and irrelevant (*see supra* § II.G.2.b), we do not agree that excluding these exhibits is warranted. The Board acts as both the gatekeeper and the weigher of evidence and is well positioned to determine and assign the appropriate weight to evidence, including by giving it little-to-no weight. *Cf Donnelly Garment Co. v. NLRB*, 123 F.2d 215, 224 (8th Cir. 1941) (“One who is capable of ruling accurately upon the admissibility of evidence is equally capable of sifting it accurately after it has been received.”). Rather than excluding evidence that is allegedly confusing, misleading, unsupported, and/or irrelevant, we instead give it little or no probative weight, as appropriate.

As for Exhibit 2004, we deny Petitioner’s motion to exclude as moot, as we do not rely on this exhibit in our Decision.

Accordingly, we deny Petitioner’s motion to exclude in its entirety.

IV. PATENT OWNER’S MOTION TO EXCLUDE

Patent Owner moves to exclude Exhibits 1002 and 1009—the declarations of Petitioner’s expert, Dr. Goldberg—as irrelevant. *See* PO Mot. 1. Regarding Exhibit 1002, Patent Owner takes issue with Dr. Goldberg consolidating his testimony in this proceeding with his testimony in related *inter partes* review IPR2023-00918, and argues that “the paragraphs o[f] Dr. Goldberg’s declaration that treat the IPRs as one in [sic] the same should be excluded.” *Id.* at 2. As for Exhibit 1009, Patent Owner argues that Dr. Goldberg relies on the wrong legal standard and conclusion. *See id.* at 3–4.

Petitioner opposes, arguing that “Patent Owner has failed to demonstrate its accusations that relevance is lacking.” Pet. Opp. 1.

The wholesale exclusion of a witness’s declaration is rarely justified. Here, we have considered Dr. Goldberg’s qualifications and the underlying bases for his statements in determining the weight to be given his testimony. Rather than excluding Dr. Goldberg’s testimony in its entirety, we evaluate each of his assertions on its own, in light of the explanation offered, and the other evidence of record.

For this reason, we deny Patent Owner’s motion to exclude in its entirety.

V. CONCLUSION

After weighing the evidence of the disclosure of the references, the uncontroverted testimony of Dr. Goldberg, and the reasoning to combine the references, Petitioner has shown by a preponderance of the evidence that claims 1–23 would have been obvious over the combination of Adharapurapu and Felt (Ground 6). Petitioner has also shown, by a preponderance of the evidence, that Felt anticipates claims 13–19 (Ground 1), renders obvious claims 13–19 (Ground 2), and that claims 1–19 would have been obvious over Felt in view of Creemer or Scofield (Ground 4).

Our conclusions regarding the Challenged Claims are summarized below:

Claims	35 U.S.C. §	Reference(s)/Basis	Claims Shown Unpatentable	Claims Not Shown Unpatentable
1–23	102	Felt	13–19	1–12, 20–23
1–23	103(a)	Felt	13–19	1–12, 20–23
13–19	103(a)	Felt, Geer		13–19
1–23	103(a)	Felt, Creemer	1–19	20–23
1–23	103(a)	Felt, Scofield	1–19	20–23
13–19	103(a)	Felt, Creemer, Geer		13–19
13–19	103(a)	Felt, Scofield, Geer		13–19
13–19	103(a)	Felt, Scofield, Geer		13–19
1–23	103(a)	Adharapurapu, Felt	1–23	
13–19	103(a)	Adharapurapu, Felt, Geer		13–19
Overall Outcome			1–23	

VI. ORDER

Accordingly, it is:

ORDERED that claims 1–23 of U.S. Patent 10,692,108 B1 have been shown to be unpatentable;

FURTHER ORDERED that Patent Owner's Motion to Exclude is denied;

FURTHER ORDERED that Petitioner's Motion to Exclude is denied; and

FURTHER ORDERED that, because this a Final Written Decision, parties to this proceeding seeking judicial review of this Decision must comply with the notice and service requirements of 37 C.F.R. § 90.2.¹⁴

¹⁴ 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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