

UNITED STATES PATENT AND TRADEMARK OFFICE

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BEFORE THE PATENT TRIAL AND APPEAL BOARD

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FOURSQUARE LABS, INC.,  
Petitioner,

v.

BOARDACTIVE CORPORATION,  
Patent Owner.

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IPR2023-00919  
Patent 10,692,108 B1

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

WOODS, *Administrative Patent Judge*.

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

## I. INTRODUCTION

Foursquare Labs, Inc., (“Petitioner”) filed a Petition (Paper 1, “Pet.”) for *inter partes* review of claims 1–23 (the “Challenged Claims”) of U.S. Patent No. 10,692,108 B1 (Ex. 1001, “the ’108 patent”). Pet. 1, 67. BoardActive Corporation (“Patent Owner”) filed a Preliminary Response (Paper 6, “Prelim. Resp.”).

Under 35 U.S.C. § 314 and 37 C.F.R. § 42.4(a), we have authority to institute an *inter partes* review if “the information presented in the petition . . . and any response . . . shows that there is a reasonable likelihood that the petitioner would prevail with respect to at least 1 of the claims challenged in the petition.” 35 U.S.C. § 314(a). After considering the Petition, the Preliminary Response, and the evidence of record, we determine the information presented shows a reasonable likelihood that Petitioner would prevail in establishing the unpatentability of at least one of the Challenged Claims of the ’108 patent. Accordingly, we institute an *inter partes* review of the Challenged Claims on the grounds asserted in the Petition.

## II. BACKGROUND

### *A. 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. Prelim. Resp. 3.

*B. Related Matters*

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

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

*C. Overview of the '108 Patent*

The '108 patent is titled “Platform for Location and Time Based Advertising.” Ex. 1001, code (54). We reproduce Figure 2 of the '108 patent, below:

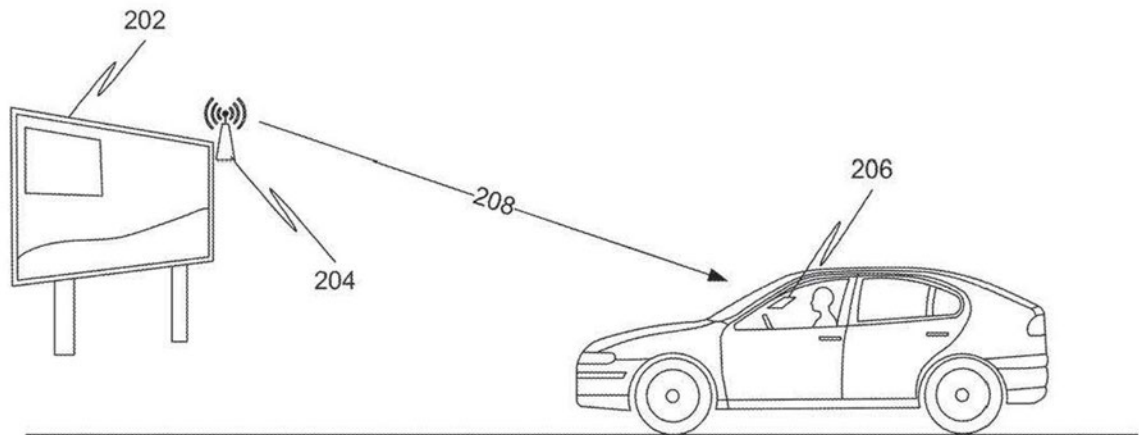


**FIG. 2**

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:

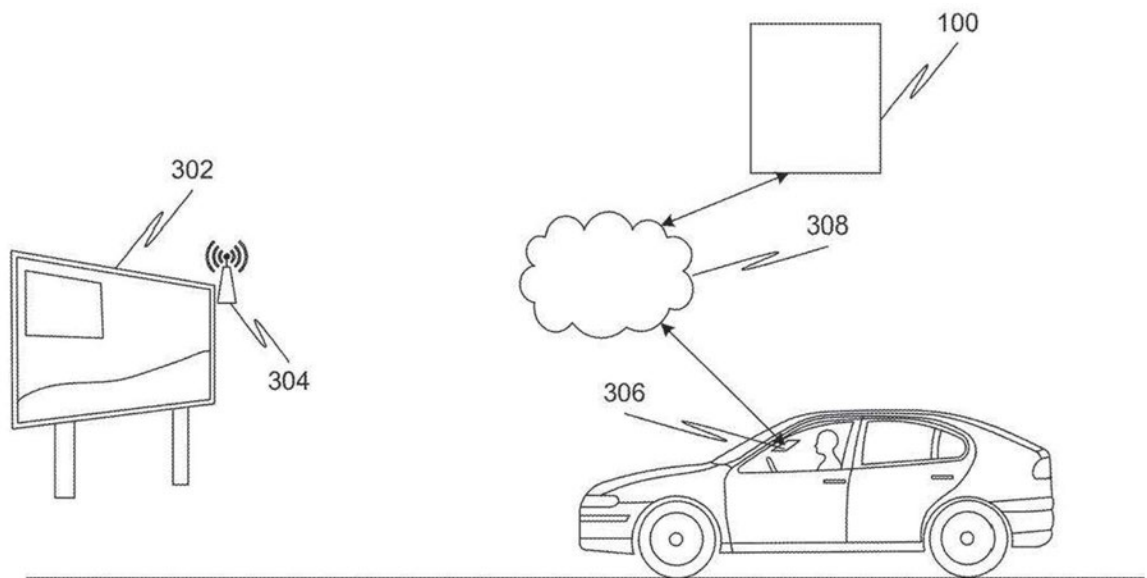


**FIG. 3**

Figure 3, reproduced above, “illustrates delivering advertisement content associated with traditional or digital signage to a mobile device of a user by communicating with a beacon.” *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:

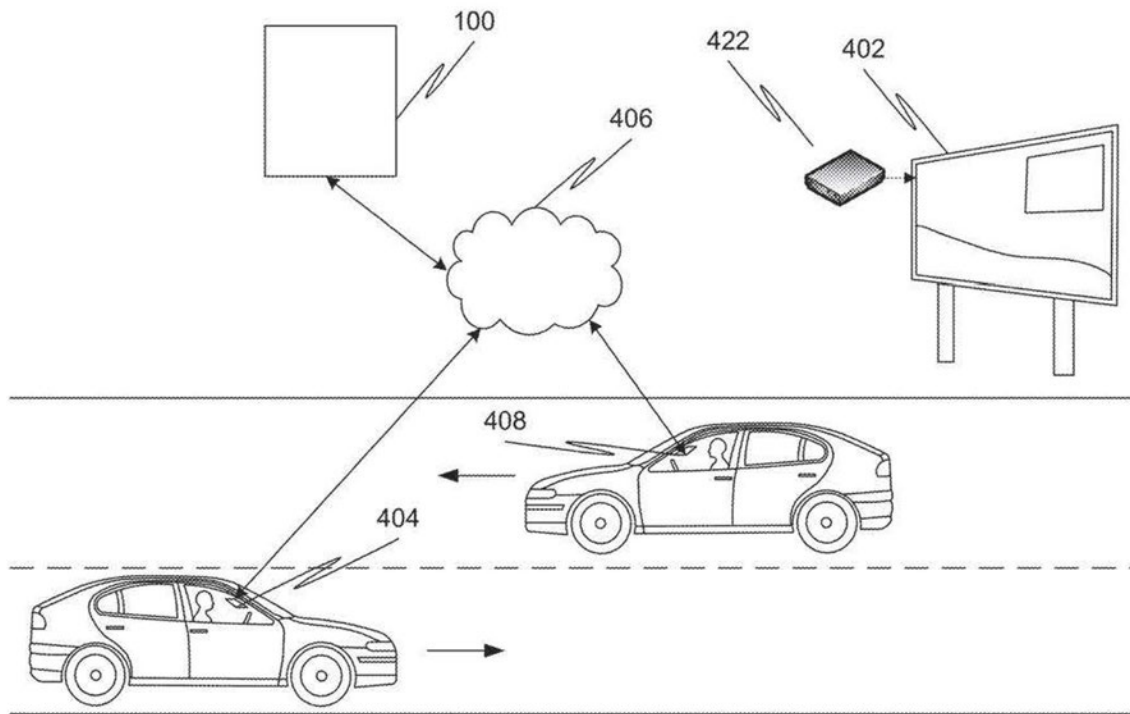


**FIG. 4**

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 automobile (or consumer) is heading, demographic information may also be used for tailoring advertising content. *See id.* at 25:60–62.

#### *D. Challenged 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. Asserted Grounds of Unpatentability<sup>1</sup>*

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

| Ground | Claims Challenged | 35 U.S.C. § <sup>2</sup> | Reference(s)                                        |
|--------|-------------------|--------------------------|-----------------------------------------------------|
| 1      | 1–23              | 102                      | Felt <sup>3</sup>                                   |
| 2      | 1–23              | 103                      | Felt                                                |
| 3      | 13–19             | 103                      | Felt, Geer <sup>4</sup>                             |
| 4      | 1–23              | 103                      | Felt, Creemer <sup>5</sup> or Scofield <sup>6</sup> |
| 5      | 13–19             | 103                      | Felt, Creemer or Scofield, Geer                     |
| 6      | 1–23              | 103                      | Adharapurapu <sup>7</sup> , Felt                    |
| 7      | 13–19             | 103                      | Adharapurapu, Felt, Geer                            |

Petitioner also relies on the Declaration of Dr. Steven H. Goldberg (Ex. 1002). *See, e.g.*, Pet. iii (referencing the declaration of Dr. Goldberg).

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<sup>1</sup> The parties should use the first named inventor (e.g., Felt or Adharapurapu) in referencing patent documents in further papers.

<sup>2</sup> 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).

<sup>3</sup> U.S. Pat. Pub. No. 2015/0095124 A1, published April 2, 2015 (Ex. 1004, “Felt” or “Verizon”).

<sup>4</sup> U.S. Pat. Pub. No. 2015/0262214 A1, published Sept. 17, 2015 (Ex. 1005, “Geer”).

<sup>5</sup> U.S. Pat. Pub. No. 2011/0171976 A1, published July 14, 2011 (Ex. 1006, “Creemer”).

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

<sup>7</sup> EP 2,424,278 A1, published Feb. 29, 2012 (Ex. 1008, “Adharapurapu” or “Alcatel”).

### III. ANALYSIS

#### *A. Level of Ordinary Skill in the Art*

Petitioner submits 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.

Pet. 3 (citing Ex. 1002 ¶ 26) (emphasis added).

Patent Owner, on the other hand, submits that a POSITA

would have a bachelor’s degree in computer science, electrical engineering, computer engineering, or an equivalent field and *three years of experience working with digital advertising and geofencing*. Additional education might compensate for less experience and vice-versa, but a bachelor’s degree is required to be the minimum education.

Prelim. Resp. 6 (emphasis added).

Petitioner’s and Patent Owner’s proposed definitions are similar, as both allow for additional education to compensate for less working experience. *Compare* Pet. 3, *with* Prelim. Resp. 6. The definitions are distinguished, however, as Patent Owner proposes that a skilled artisan have “three years of experience working with digital advertising and geofencing” (Prelim. Resp. 6), whereas Petitioner’s definition more generally requires “two to three years of practical experience” (Pet. 3).

For purposes of this Decision, we adopt Petitioner’s assessment of the level of ordinary skill in the art. We disagree that a skilled artisan would have specific working experience with digital advertising and geofencing, as Patent Owner proposes. *See* Prelim. Resp. 6. We find Petitioner’s

definition, which more generally requires practical working experience, is consistent with the '108 patent and the asserted prior art. Pet. 3; *see Okajima v. Bourdeau*, 261 F.3d 1350, 1355 (Fed. Cir. 2001). Whether we adopt Petitioner's or Patent Owner's proposed level of skill, however, would not change the outcome of this Decision, based on the similarity in qualifications proposed by each party.

*B. Claim Construction*

In this *inter partes* review, we apply the same claim construction standard that would be used in a civil action under 35 U.S.C. § 282(b). 37 C.F.R. § 42.100(b). In applying this standard, we generally give claim terms their ordinary and customary meaning as would be understood by a person of ordinary skill in the art at the time of the invention and in the context of the entire patent disclosure. *See id.*; *Phillips v. AWH Corp.*, 415 F.3d 1303, 1312–14 (Fed. Cir. 2005) (en banc).

Petitioner does not expressly construe any term. *See* Pet. 3–4.

Patent Owner proposes construction for “consumer” and “course of travel.” Prelim. Resp. 6–10.

*1. “consumer”*

Patent Owner proposes that the term “consumer” should be construed to mean a “user or person to whom an advertisement is sent to elicit engagement.” Prelim. Resp. 7. In support of this argument, Patent Owner cites to the Specification of the '108 patent, which Patent Owner submits is a definition of the term. *See id.* According to Patent Owner, the following description provides a definition of “consumer”:

The platform may enable a platform user (e.g., an Administrator or “Admin”) to interact with its target content **consumers** based on, for example, but not limited to, the location of the **consumer** in time and space, the actions the **consumer** takes within the time and space, the characteristics of the **consumer**, and the characteristics of their technical devices. Accordingly, the various embodiments disclosed herein provide a new medium of communication with **consumers**.

*Id.* at 7–8 (quoting Ex. 1001, 8:35–57).

Patent Owner further cites to the Notice of Allowance, in which the Examiner states,

The scope of the claims has been changed to that of an advertising distribution campaign with an added third rule specifying a course of travel associated with the consumer, and determining that consumer has complied with said plurality of rules and is eligible for receiving distribution campaign.

Prelim. Resp. 8 (quoting Ex. 2001, 41).

At this stage of the proceeding, we disagree that “consumer” should be construed so narrowly as limited to a “user or person to whom an advertisement is sent to elicit engagement.” Prelim. Resp. 7. The description cited by the Patent Owner, which is expressly “not limited to” the examples provided, does not use the term with the requisite clarity, deliberateness, or precision to support Patent Owner’s proposed definition. *See In re Paulsen*, 30 F.3d 1475, 1480 (Fed. Cir. 1994) (inventor may define specific terms used to describe invention, but must do so “with reasonable clarity, deliberateness, and precision” and, if done, must “. . . set out his uncommon definition in some manner within the patent disclosure’ so as to give one of ordinary skill in the art notice of the change” in meaning) (quoting *Intellicall, Inc. v. Phonometrics, Inc.*, 952 F.2d 1384, 1387–88 (Fed. Cir. 1992)).

Although the Specification of the '108 patent describes targeting consumers through an advertising platform, the Specification does not suggest that the word “consumer” is limited to a “user or person to whom an advertisement is sent to elicit engagement,” as advanced by Patent Owner (*see* Prelim. Resp. 7), presumably excluding people who are not sent the targeted advertising. *See, e.g.*, Ex. 1001, 8:35–57. At this stage of the proceeding, we decline to import limitations from the Specification into the claim where we do not see a clear definition or disavowal of claim scope to limit the meaning of the claim. *See, e.g., SuperGuide Corp. v. DirecTV Enterprises, Inc.*, 358 F.3d 870, 875 (Fed. Cir. 2004).

As to the Notice of Allowance, and at this stage of the proceeding, we further disagree with Patent Owner that the Examiner defined the term as Patent Owner proposes. *See* Prelim. Resp. 8 (quoting Ex. 2001, 41). Rather, we find that the Examiner was simply using the term “consumer” in the context of an “advertising distribution campaign,” as broadly recited in the claims. *See, e.g.*, Ex. 1001, 38:44–39:3. Nothing in the Notice of Allowance supports Patent Owner’s construction that the term “consumer” should be limited to a “user or person to whom an advertisement is sent to elicit engagement,” while excluding those people who are not sent an advertisement “to elicit engagement.” *See* Prelim. Resp. 7–8.

Accordingly, at this stage of the proceeding, we decline to adopt Patent Owner’s narrow construction of the term “consumer,” and rather give it its plain and ordinary meaning.

If either party disagrees with this construction, or proposes an express construction for the term, that party shall explain why the construction is in error in its respective Patent Owner Response or Petitioner Reply.

2. “*course of travel*”

Both parties propose that the term “course of travel” should be given its plain and ordinary meaning. Prelim. Resp. 8; *see also* Pet. 3.

We agree. Indeed, we generally give claim terms their ordinary and customary meaning as would be understood by a person of ordinary skill in the art at the time of the invention and in the context of the entire patent disclosure. *See Phillips*, 415 F.3d at 1312–14.

If either party desires to propose an express construction for the term, or otherwise disagrees that the plain and ordinary meaning applies, that party shall propose its construction in its respective Patent Owner Response or Petitioner Reply.

3. *Other claim terms and further construction*

For purposes of this Decision, we need not and do not formally construe any other claim term. *See Nidec Motor Corp. v. Zhongshan Broad Ocean Motor Co.*, 868 F.3d 1013, 1017 (Fed. Cir. 2017) (stating that “we need only construe 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))).

We remind the parties of their obligation to submit any formal claim construction from a related proceeding, including the Related Litigation. *See Consolidated Trial Practice Guide* (“Consolidated Practice Guide” or “CTPG”)<sup>8</sup> at 47–48 (“parties should submit a prior claim construction as soon as the decision is available.”). The parties are further reminded that

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<sup>8</sup> Available at <https://www.uspto.gov/TrialPracticeGuideConsolidated>.

“[e]ach party bears the burden of providing sufficient support for any construction advanced by that party.”). *Id.*

*C. Principles of Law*

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).

A patent claim is unpatentable as obvious if the differences between the claimed invention and the prior art are such that the claimed invention as a whole would have been obvious before the effective filing date of the claimed invention to a person having ordinary skill in the art to which the claimed invention pertains. *See KSR Int’l Co. v. Teleflex Inc.*, 550 U.S. 398, 406 (2007). The question of obviousness is resolved on the basis of underlying factual determinations including: (1) the scope and content of the prior art; (2) any differences between the claimed subject matter and the prior art; (3) the level of ordinary skill in the art; and, when presented, (4) objective evidence of nonobviousness. *Graham v. John Deere Co.*, 383 U.S. 1, 17–18 (1966).

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

*D. Ground I 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.

*1. Felt (Ex. 1004)<sup>9</sup>*

Felt, which Petitioner refers to as Verizon (*see* 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.” *Id.* at code (57). We reproduce Figure 1 of Felt, below:

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<sup>9</sup> *Supra* n.1.

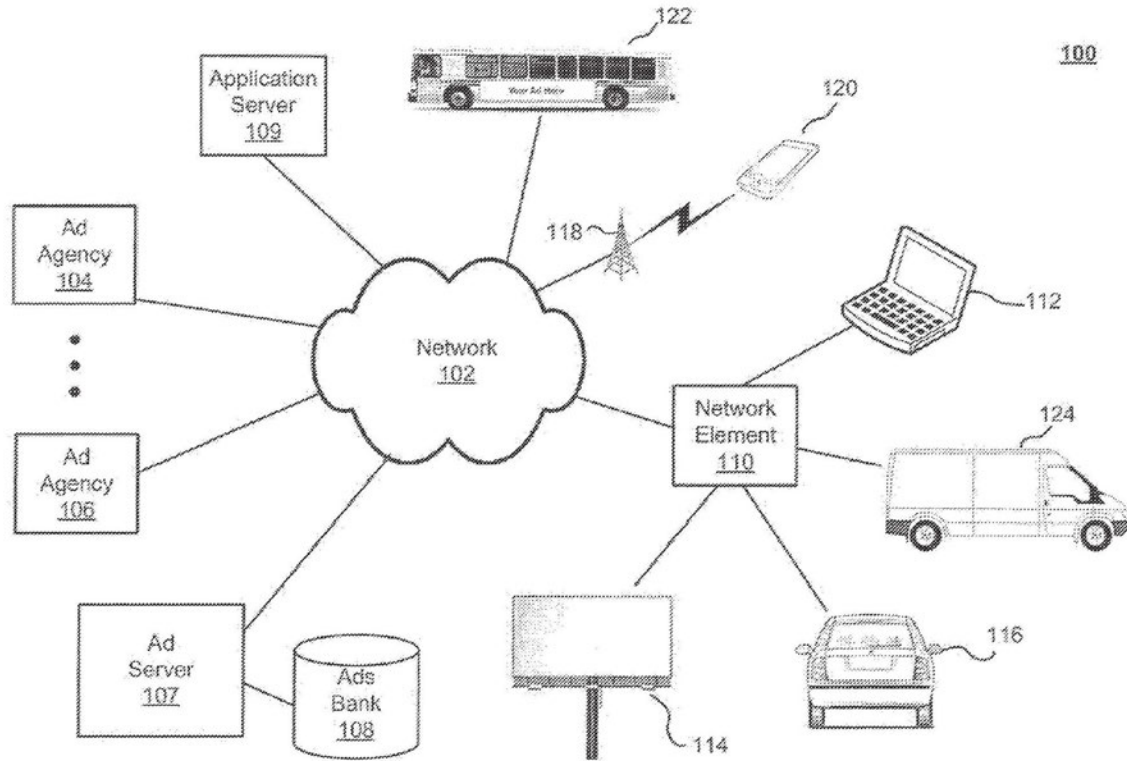


Fig. 1

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, 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 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.” Prelim. Resp. 17. Patent Owner explains that sending advertisements, as disclosed in Felt, is not a “content distribution campaign.” *Id.* Patent Owner explains 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 mobile device 120.” *Id.* at 17–18 (citing Ex. 1004 ¶ 54). Patent Owner 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.* at 18 (citing Ex. 1001, 38:54–55).

At this preliminary stage of the proceeding, we disagree with Patent Owner’s contentions.

Patent Owner’s argument appears premised on a construction that “content distribution campaign” excludes the “marketing content” taught in Felt. Yet, Element 1(a) merely requires the “content distribution campaign” to comprise “*a geolocation, and media content associated with the geolocation.*” Pet. iv (emphasis added). Patent Owner’s construction deviates from the plain and ordinary meaning of these terms, yet Patent Owner does not propose a formal construction of “content distribution campaign” to support its position. *See* Prelim. Resp. 6–10.

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, “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. *Id.* ¶ 36. Petitioner further submits the uncontroverted testimony of Dr. Goldberg to support a finding that Felt’s advertising campaign satisfies the recited “content distribution campaign.” *See* Ex. 1002 ¶¶ 139, 140.

At this preliminary stage of the proceeding, Petitioner demonstrates a reasonable likelihood that Felt’s method of advertising satisfies 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 to be present for the content distribution campaign,” yet “the Petitioner jumbles the three separate requirements together.” Prelim. Resp. 19 (citing Pet. 6–7). Patent Owner further argues 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).

At this preliminary stage of the proceeding, we disagree with Patent Owner’s argument. Based on the current state of briefing, we find that Petitioner addresses the three sub-elements of 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.*

Ex. 1004 ¶ 28 (emphasis added).<sup>10</sup> At this stage, Petitioner has sufficiently shown that Felt’s teaching of associating its marketing and advertising content based in part on “hours of operation” satisfies the recited “period of time.”

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 demo graphic data such as *age, ethnicity, employment status, home ownership status, income, education, or knowledge of languages*, for example.

*Id.* ¶ 48 (emphasis added). At this stage, we are persuaded that 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).<sup>11</sup> Felt discloses that

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<sup>10</sup> Bold emphasis to reference numerals in the U.S. Patents and Patent Applications is omitted in this Decision.

<sup>11</sup> Patent Owner further argues that claim requires the “course of travel” to be “determined using, at least in part, a first location and a second location.” Prelim. Resp. 20 (citing Ex. 1001, 38:65–67) (emphasis omitted). We

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 (emphasis added). At this stage, we are persuaded 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.”

At this preliminary stage of the proceeding, Petitioner demonstrates a reasonable likelihood that Felt’s method of advertising 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 Felt discloses this limitation. Pet. 9–10. Petitioner explains that 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 responds that “Petitioner’s argument misreads and fails to address the actual claim language.” Prelim. Resp. 22. Patent Owner explains, “Compounding the lack of clarity in the Petition, Dr. Goldberg provides no additional insight, stating what he ‘understands’ and then citing

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specifically address this limitation is addressed under Element 1(f). *See infra* § D.2.f.

multiple paragraphs of [Felt] without explanation.” *Id.* (citing Ex. 1002 ¶¶ 258–259). Patent Owner recites certain excerpts of Felt to argue that “the cited paragraphs in the Petition fail to teach or describe the element of ‘receiving a first indication that the consumer is at a first location within a radius of the geolocation.’” *Id.* at 26; *see also id.* at 22–26 (addressing the cited paragraphs and Dr. Goldberg’s testimony). Patent Owner explains that Felt focuses on mobile units, which are not “consumer” devices (*id.* at 24) and that Felt does not describe a consumer embodiment (*id.* at 25).

At this stage, Petitioner has the stronger position. Patent Owner’s position appears premised on a narrow construction of “consumer”—namely, those users or people who are sent advertisements to elicit engagement (*see* Prelim. Resp. 7)—that we do not adopt. *See supra* § III.B.1.

Felt 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* to yield location data. *Id.* Felt further discloses that the location data is used determine whether to display the marketing content. *Id.* Felt provides a specific example in which advertisements may be displayed “related to hotels, car

rentals, tourism, nearby restaurants open for breakfast” if the user is “traveling through or stationed at Newark Airport.” *Id.* ¶ 42.

At this preliminary stage of the proceeding, Petitioner demonstrates a reasonable likelihood that Felt satisfies “receiving a first indication that the consumer is at a first location within a radius of the geolocation,” as 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 reiterates its argument that the “first indication” of Element 1(c) “has not been taught or described in” Felt and that Felt “focuses on mobile units (124) that are not consumer or consumer devices.” Prelim. Resp. 27. Patent Owner cites to paragraph 40 of Felt which states, “the decision module may take into account user profiles and/or user settings before distributing marketing content to various mobile device 120.” *Id.* at 28. Patent Owner further contends that Petitioner’s “declaration fails to make a distinction between a consumer mobile device 120 and non-consumer devices, such as mobile unit 124.” *Id.* at 29 (citing Ex. 1002 ¶¶ 261–263).

At this preliminary stage of the proceeding, we disagree with Patent Owner’s argument. Patent Owner’s citations to Felt seem inapposite with

the claim limitation, which recites relatively broad language. As best as we can discern, Patent Owner’s argument appears to be premised on an overly-narrow interpretation of “consumer” —namely, those users or people who are sent advertisements to elicit engagement (*see* Prelim. Resp. 7)—that we do not adopt. *See supra* § III.B.1. At this stage, we disagree that Felt’s users are not consumers as recited in the claim.

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

As discussed above in connection with Element 1(c), 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 “related 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.

Based on these and other disclosures, and based on the current state of briefing, 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).

At this preliminary stage of the proceeding, Petitioner demonstrates a reasonable likelihood that Felt satisfies “assessing, in response to the first

indication, the at least one element of profile data associated with the consumer,” as 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 in Felt, “[n]o second consumer location is received.” Prelim. Resp. 30. Patent Owner explains, “The truth is that no second location is found in [Felt], and no indication is provided in [Dr. Goldberg’s] Declaration.” *Id.* at 31.

Patent Owner’s argument has merit on the current record.

At this *preliminary stage of the proceeding*, we have reservations as to whether Felt discloses the step of “receiving a second indication that the consumer is at a second location.” Based on the current briefing, it appears that neither the Petition (*see* Pet. 11) nor the cited portion of Dr. Goldberg’s declaration (*see* Ex. 1002 ¶¶ 264–268) clearly sets 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), even if true, we are skeptical whether this fully addresses the step of “receiving a second indication that the consumer is at a second location,” as recited in Element 1(e). Based on the current state of briefing, we are skeptical whether a skilled artisan would have modified Felt, in view of only Felt’s teachings, to add the step of receiving a second indication that the consumer is at a second location. *See* Pet. 11–12.

Accordingly, at this preliminary stage of the proceeding, we are skeptical whether the Petition demonstrates a reasonable likelihood that Felt’s method of advertising satisfies Element 1(e) or 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 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 this element is not disclosed, citing its arguments discussed above in connection with Elements 1(a) and (b). *See* Prelim. Resp. 33.

As explained above, Felt’s marketing campaign considers multiple factors in executing its advertising campaign. *See supra* §§ III.D.2.a, b. For the reasons discussed above in connection with Elements 1(a) and (b), and at this preliminary stage of the proceeding, we disagree with Patent Owner’s assertion that Felt fails to satisfy these limitations.

Rather, at least at this preliminary stage of the proceeding, Petitioner demonstrates a reasonable likelihood that Felt satisfies “establishing that the consumer is eligible for the content distribution campaign when the plurality of rules is satisfied,” as recited in Element 1(g).

*g. Summary of Independent Claim 1*

At this preliminary stage, we are skeptical whether the Petition demonstrates a reasonable likelihood that Felt’s method of advertising satisfies Element 1(e) or 1(f).

*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, at least at this preliminary stage of the proceeding, we are skeptical whether the Petition demonstrates a reasonable likelihood that Felt anticipates or renders obvious claims 2–12.

*4. Independent Claim 13*

We address each of the limitations 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).

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 proximity of the mobile vehicle unit.” *Id.*

At this preliminary stage of the proceeding, Petitioner demonstrates a reasonable likelihood that Felt’s method of advertising satisfies 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, “In 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 address “specifying at least one action to be performed by a consumer.” *See* Prelim. Resp. 35.

At this preliminary stage of the proceeding, we disagree with Patent Owner’s position.

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.

At this preliminary stage of the proceeding, Petitioner demonstrates a reasonable likelihood that Felt’s method of advertising satisfies 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. *See* Pet. 22.

Element 13(c) is similar to Element 1(c). For the reasons discussed above in connection with Element 1(c), at this preliminary stage of the proceeding, Petitioner demonstrates a reasonable likelihood that Felt discloses “receiving a first indication that the consumer is within a radius of the geolocation,” as 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.* (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).

In support of Petitioner’s position, Dr. Goldberg testifies,

It is my opinion that, to the extent that [Felt] does not disclose the limitations in exact terms, 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”, “location 2”, etc. Otherwise, the system would not be able to actively update the advertising content based on the time and location.* I understand [Felt] also discloses responsive tracking to consider the consumers’ acts upon content. [Felt], ¶¶[0050] (acted upon, retain information, historical actions), [0053]. [Felt] notes that consumers ‘acting upon’ content includes e-shopping, mapping locations of businesses, and physically traveling to businesses. [Felt], ¶[0053]. As discussed in element 1(d), it is my opinion that, to the extent it is contended that [Felt] does not describe responsive assessment, a POSITA, such as, for example, myself, 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.* In my opinion, 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 (emphases added).

At this preliminary stage of the proceeding, and for reasons similar to those discussed above in connection with claim 1 (*see supra* § III.D.2.e), we are skeptical whether Felt *discloses* the step of “*tracking the consumer* in response to receiving the first indication to determine whether the consumer has performed the at least one action.” Petitioner does not propose a definition of “tracking the consumer” (*see* Pet. 3–4), yet the Petition and Dr. Goldberg’s testimony suggests that the *location of the consumer is tracked via identification of multiple locations*, such as “location 1” and “location 2.” *See* Ex. 1002 ¶ 305; *see also* Pet. 22–23 (describing “occupying the geofence radius” and “tracking as the user travels”). For example, Dr. Goldberg testifies that Felt “must receive some type of ‘indication’, such as instructions, a GPS ping on an internal map . . . [o]therwise, the system would not be able to actively update the advertising content based on the time and location.” Ex. 1002 ¶ 305. Dr. Goldberg’s testimony suggests that multiple locations of the consumer are “tracked” (*see id.*), yet, at this preliminary stage, and as similarly discussed above in relation to claim 1 (*see supra* § III.D.2.e), we are skeptical whether Felt *tracks* consumer location.

At this preliminary stage of the proceeding, we are skeptical whether the Petition demonstrates a reasonable likelihood that Felt’s method of advertising discloses 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.

Claim Element 13(e) is similar to Element 1(g). For the reasons discussed above in connection with Element 1(g), at this preliminary stage of the proceeding, Petitioner demonstrates a reasonable likelihood that Felt satisfies Element 13(e).

*f. Summary of Independent Claim 13*

At this preliminary stage, we are skeptical whether Felt’s method of advertising satisfies Element 13(d), and whether the Petition demonstrates a reasonable likelihood that Felt anticipates or renders obvious claim 13.

*5. Dependent Claims 14–19*

Claims 14–19 depend from independent claim 13. Ex. 1001, 40:7–30. In addressing these claims under Grounds 1 and 2, Petitioner relies on the same analysis relied upon in challenging claim 13. *See* Pet. 23–27. For the same reasons discussed above regarding claim 13, at this preliminary stage of the proceeding, we are skeptical whether the Petition demonstrates a reasonable likelihood that Felt anticipates or renders obvious claims 14–19.

*6. Independent Claim 20*

Like independent claim 1, independent claim 20 recites, “receiving a second determination that the second rule has been satisfied” (Element 20(g)). *Compare* Ex. 1001, 40:53–54, *with id.* at 38:63–64. Petitioner submits that Felt discloses this limitation. *See* Pet. 29–30.

Patent Owner argues that the Petition fails to address this element. *See* Prelim. Resp. 44. 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).

On the current record, Patent Owner’s argument has merit.

As this preliminary stage of the proceeding, we are skeptical whether the Petition demonstrates a reasonable likelihood that Felt satisfies the “second message” limitations. Upon reviewing the Petition, we are unsure of what, exactly, the “first” and “second” messages 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 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. We are skeptical whether the Petition provides sufficient explanation to address the “second message” limitations.

At this preliminary stage of the proceeding, we are skeptical whether the Petition demonstrates a reasonable likelihood that Felt’s method of advertising satisfies independent 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 regards to claim 20, at this preliminary

stage of the proceeding, we are skeptical whether the Petition demonstrates a reasonable likelihood that Felt anticipates or renders obvious claims 21–23.

8. *Summary of Grounds 1 and 2*

At this preliminary stage of the proceeding, we are skeptical whether the Petition demonstrates a reasonable likelihood that Felt anticipates (Ground 1) or renders obvious (Ground 2) claims 1–23.

*E. Ground 4: Obvious over Felt in view of 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 (Ex. 1006)*

Creemer is a U.S. Patent Publication titled “Identifying Client Patterns Using Online Location-Based Derivative Analysis.” Ex. 1006, code (54). We reproduce Figure 8 of Creemer, below:

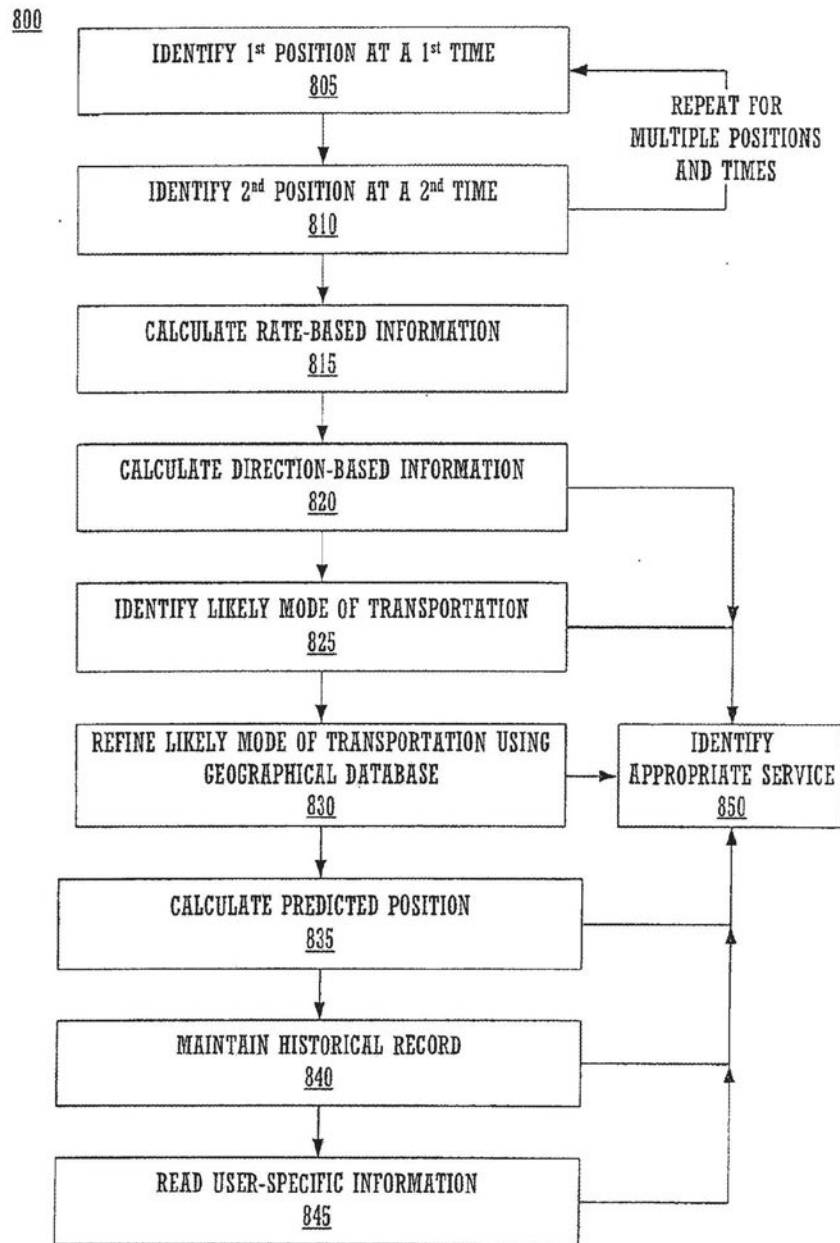


FIGURE 8

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 (Ex. 1007)*

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).

## *3. Independent Claim 1*

As explained above, under Grounds 1 and 2 and at this preliminary stage of the proceeding, we are skeptical whether the Petition demonstrates a reasonable likelihood 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 lumps 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.* 11.

In contesting the proposed combination with Creemer, Patent Owner presents the following five arguments:

1. Petitioner provides insufficient discussion, and as such, “Cramer [sic] is only to be relied on, ‘to the extent that [Felt’s] rules for speed/duration, proximity, and/or manner of travel do not disclose a course of travel.’” *See* Prelim. Resp. 49–50.
2. The “Petition only relies on Creemer with respect to claim 1, and no mention is made concerning independent claims 13 and 20.” *Id.* at 50.
3. 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.” *Id.*
4. The “Petition is merely relying on a portion of Creemer’s Abstract . . . to supply a motivation to combine, but this brief reference is a conclusory motivation at best.” *Id.*
5. There is no motivation to combine as Felt “fails to teach or describe all the elements . . . as multiple elements are missing.” *Id.* at 50–51 (citation omitted).

At this preliminary stage of the proceeding, on the current record, we disagree with Patent Owner’s contentions.

As to Creemer, 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 explains, “Creemer discloses such comparison to apply the user’s path for targeted content.” *Id.* (citing Ex. 1006 ¶¶ 59–66; Ex. 1002 ¶¶ 270–271). Based on these 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.

*Id.* (citing Ex. 1002 ¶ 273).

Patent Owner's arguments mischaracterize Petitioner's position and understate Creemer's precise teachings that Petitioner relies on, such as Creemer's Figure 8 and its associated description. At this stage of the proceeding, Petitioner shows sufficiently that a skilled artisan would have looked to Creemer's teaching of identifying two different positions (steps 805, 810) to calculate rate-based information (step 815) and direction-based information (step 820) to further improve the accuracy of Felt's targeted communications. *See* Ex. 1006 ¶¶ 59–64, Fig. 8; *see also* Pet. 11.

As to Scofield, Patent Owner argues that Petitioner simply cites to “a plethora of string cites [to Scofield] with little or no explanation” and that “there is nothing . . . in Scofield that mentions or insinuates how to ‘increase accuracy, reduce noise and/or otherwise promote efficiency in targeted communications.’” Prelim. Resp. 51.

At this preliminary stage, Petitioner has the stronger position.

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 the current state of briefing, we disagree with Patent Owner that Petitioner provides a “plethora of string cites.” *Compare* Prelim. Resp. 51, *with* Pet. 12. Rather, Petitioner precisely cites to Scofield's

teachings at column 5, line 55, to column 6, line 36. *See* Pet. 12. At this stage of the proceeding, Petitioner’s expert, 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. Based on the current state of briefing, Petitioner sufficiently shows that a person of ordinary skill would have had reason to modify Felt’s system to obtain first and second locations, as taught by Scofield, to improve the accuracy of Felt’s system.

At this preliminary stage of the proceeding, Petitioner demonstrates a reasonable likelihood that Felt’s method of advertising, as modified based on Creemer’s and Scofield’s teachings, satisfies Elements 1(e) and 1(f).

Furthermore, and at this preliminary institution stage, Petitioner has shown a reasonable likelihood that independent claim 1 would have been obvious over Felt, in view of Creemer and Scofield, under Ground 4.

#### *4. Dependent Claims 2–12*

Petitioner identifies where it contends Felt, Creemer, and Scofield teach or suggest every limitation of dependent claims 2–12. *See* Pet. 13–20.

Patent Owner does not address Petitioner's arguments with respect to these additional claims, apart from the arguments addressed above. *See* Prelim. Resp. 46–52.

Upon review of the parties' arguments and supporting evidence, and at this preliminary stage of the proceeding, Petitioner has shown a reasonable likelihood that the subject matter of claims 2–12 would have been obvious over the combined disclosures of Felt, Creemer, and Scofield.

#### *5. Claims 13–19*

Under Grounds 1 and 2, we are skeptical whether Felt's method of advertising satisfies Element 13(d).

Under Ground 4, Petitioner does not rely on Creemer or Scofield to address Element 13(d). *See* Pet. 22–23. In other words, Petitioner's reliance on Creemer and Scofield does not address our skepticism regarding Grounds 1 and 2.

Accordingly, at this preliminary stage of the proceeding, we are skeptical whether the Petition demonstrates a reasonable likelihood that Felt in view of Creemer and Scofield renders obvious claim 13 or its dependent claims 14–19.

#### *6. Claims 20–23*

Under Grounds 1 and 2, at this preliminary stage, we are skeptical whether Felt's method of advertising renders independent claim 20 unpatentable. *See supra* § III.D.6.

Under Ground 4, Petitioner does not rely on Creemer or Scofield to address our skepticism regarding Felt's teachings. *See* Pet. 26–30.

Accordingly, at this stage, we are also skeptical whether the Petition demonstrates a reasonable likelihood that Felt in view of Creemer and Scofield renders obvious independent claim 20 or its dependent claims 21–23.

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

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

*1. Geer (Ex. 1005)*

Geer is a U.S. Patent Publication titled “Geofenced Event-Based Fan Networking Methods.” Ex. 1005, code (54). Greer describes “a fan networking system (FNS), available through a software application, executing on fans’ portable smart devices for an event to be held at a venue.” *Id.* at code (57). “A FNS may offer event-customized services to fans, such as messaging, fan groups, mementos, coupons, ‘friends’, and contests.” *Id.*

*2. Independent Claim 13*

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, Geer discloses responsive activation of high-resolution tracking (‘HIRES’).” Pet. 34. Petitioner explains 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 “Petition fails to address any motivation to combine [Felt] with Geer.” Prelim. Resp. 46. Patent Owner explains that “a POSITA would not have been motivated to combine the teachings of [Felt] with Geer to arrive at the claimed invention.” *Id.* at 48.

At this stage of the proceeding, Patent Owner’s argument has merit. Based on our preliminary understanding, 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 appear to address how the proposed combination would satisfy the relevant claim limitation, which requires, “tracking the consumer in response to receiving a 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.

At this preliminary stage of the proceeding, we are skeptical whether the Petition demonstrates a reasonable likelihood that Felt in view of Geer (Ground 3) or Felt in view of Creemer, Scofield, or Geer (Ground 5) renders claim 13 unpatentable.

*G. Ground 6: Obvious over Adharapurapu (Alcatel) in view of Felt*  
Petitioner submits that Claims 1–23 are unpatentable over  
Adharapurapu in view of Felt. Pet. 1, 35–65.

*1. Adharapurapu (Ex. 1008)*<sup>12</sup>

Adharapurapu, which Petitioner refers to as Alcatel (*see* 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.” *Id.* at code (57). Adharapurapu’s “system keeps track of the direction of travel of the mobile device through locations of predetermined tracker base stations passed by the mobile device.” *Id.* We reproduce Figure 1 of Adharapurapu, below:

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<sup>12</sup> *Supra* n.1.

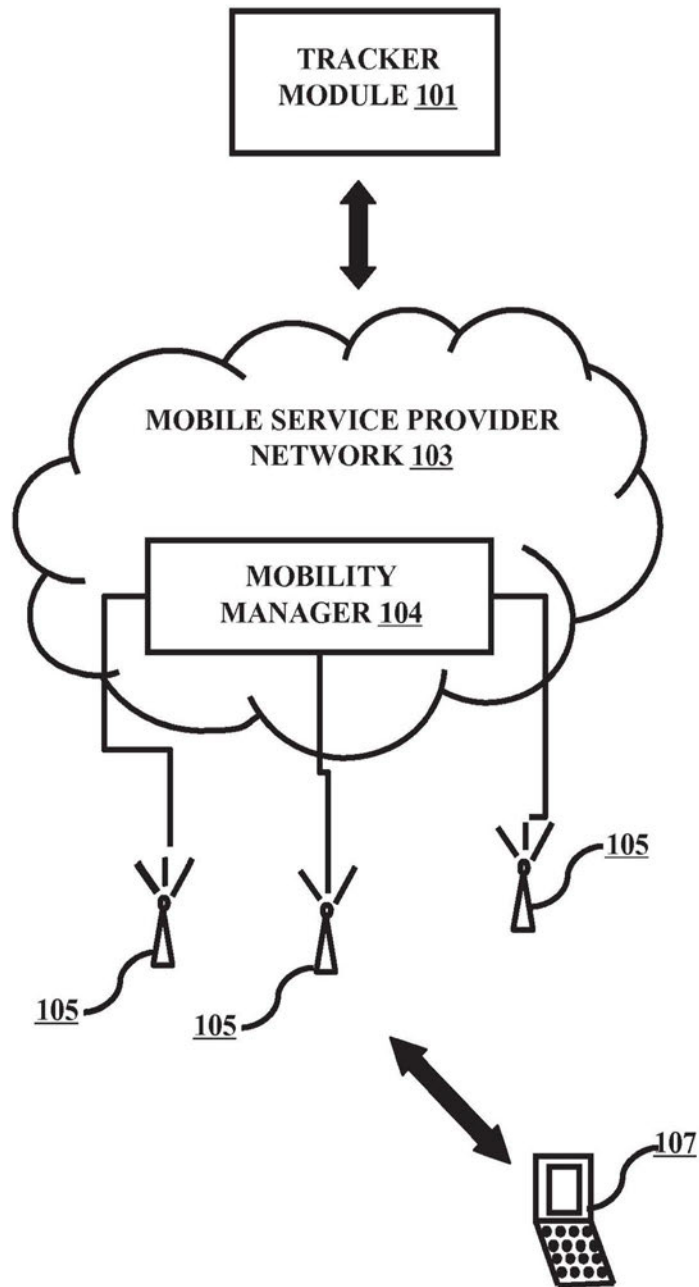


**FIG. 1**

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

Patent Owner does not dispute Petitioner’s assertions. *See* Prelim. Resp. 53–54.

At this preliminary stage of the proceeding, Petitioner demonstrates a reasonable likelihood that Adharapurapu in view of Felt satisfies 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,” Petition 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).

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).

Patent Owner does not dispute that Adharapurapu discloses this limitation. *See* Prelim. Resp. 53–54.

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.

*Id.* at 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. Prelim. Resp. 54. Patent Owner explains that the claims of the ’108 patent

have nothing to do with the proposed motivation. *See id.* at 53 (citations omitted).

At this preliminary stage of the proceeding, we disagree with Patent Owner's arguments.

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.

At this preliminary stage, Petitioner has shown a reasonable likelihood that a skilled artisan would have had to reasons to modify Adharapurapu by incorporating rules that consider, for example, a user's age, as taught by Felt (*see, e.g.*, Ex. 1004 ¶ 48), for the purpose of tailoring advertising content to that user. *See* Ex. 1002 ¶ 342 (testifying to the same). Based on the current record, Petitioner sufficiently shows that 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 the relevant age of the user. *See* Ex. 1008 ¶ 21 ("With the location information, the direction of travel is ascertained and content information related to restaurant R1 can be sent to mobile device 107"); *see also* Ex. 1004 ¶ 48 ("The user provide may also include . . . various demographic data such as age.").

At this preliminary stage of the proceeding, Petitioner demonstrates a reasonable likelihood that Adharapurapu in view of Felt 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).

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. *Id.* (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).

Patent Owner does not specifically address this element. *See* Prelim. Resp. 53–54.

At this preliminary stage of the proceeding, Petitioner demonstrates a reasonable likelihood that Adharapurapu in view of Felt 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).

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.* (citing Ex. 1002 ¶ 346).

Patent Owner does not specifically address this element. *See* Prelim. Resp. 53–54.

At this preliminary stage of the proceeding, Petitioner demonstrates a reasonable likelihood that Adharapurapu in view of Felt 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).

Patent Owner does not specifically address this element. *See* Prelim. Resp. 53–54.

At this preliminary stage of the proceeding, Petitioner demonstrates a reasonable likelihood that Adharapurapu in view of Felt satisfies 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).

Patent Owner does not specifically address this element. *See* Prelim. Resp. 53–54.

At this preliminary stage of the proceeding, Petitioner demonstrates a reasonable likelihood that Adharapurapu in view of Felt satisfies Element 1(g).

*g. Summary of Claim 1*

At this preliminary stage of the proceeding, Petitioner demonstrates a reasonable likelihood that Adharapurapu in view of Felt renders claim 1 unpatentable.

*3. Claims 2–23*

Petitioner identifies where Adharapurapu in view of Felt teach or suggest every limitation of the other challenged claims, namely, claims 2–23. *See* Pet. 40–65. Patent Owner does not address Petitioner’s arguments with respect to these additional claims, apart from the arguments addressed above. *See* Prelim. Resp. 53–54.

Upon review of the parties’ arguments and supporting evidence, and based on the current state of briefing, Petitioner demonstrates a reasonable likelihood that the subject matter of claims 2–23 would have been obvious over the combined disclosures of Adharapurapu and Felt.

*4. Summary of Ground 6*

At this preliminary stage of the proceeding, Petitioner has shown a reasonable likelihood that Adharapurapu in view of Felt renders obvious claims 1–23 under Ground 6.

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

Ground 7 is similar to Grounds 3 and 5, in that Petitioner challenges claims 13–19 based on the additional teachings of Geer. *Compare* Pet. 34–35 (Ground 3 and 5), *with id.* at 66–67 (Ground 7).

As with Grounds 3 and 5, Patent Owner relies on the arguments discussed above in connection with these Grounds. *See* Prelim. Resp. 54.

At this stage of the proceeding, and for the same reasons discussed above, Patent Owner’s argument has merit.

Based on the current state of the record, it is not clear from the Petition 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, at this stage, 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 a first indication to determine whether the consumer has performed the at least one action” (*id.* at vi (Element 13(d))). Based on our current understanding, it appears that 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 34–35.

At this preliminary stage of the proceeding, we are skeptical whether the Petition demonstrates a reasonable likelihood that Adharapurapu, Felt, and Geer (Ground 7) renders independent claim 13 or its dependent claims 14–19 unpatentable.

#### IV. CONCLUSION

After considering the evidence and arguments presented in the Petition and Preliminary Response, we determine that the information presented at least shows a reasonable likelihood that Petitioner would prevail

in establishing that (1) claims 1–12 would have been obvious over the combined disclosures of Felt, Creemer, and Scofield (Ground 4) and (2) claims 1–23 would have been obvious over the combined disclosures of Adharapurapu and Felt (Ground 6).

Accordingly, we institute *inter partes* review of the Challenged Claims under all grounds asserted in the Petition. CTPG 5 (“In instituting a trial, the Board will either (1) institute as to all claims challenged in the petition and on all grounds in the petition, or (2) institute on no claims and deny institution.”).

#### V. ORDER

Accordingly, it is

ORDERED that, pursuant to 35 U.S.C. § 314(a), an *inter partes* review is instituted for claims 1–23 of the ’108 patent on the unpatentability grounds asserted in the Petition; and

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

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Patent 10,692,108 B1

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