

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

FOURSQUARE LABS, INC.,
Petitioner,

v.

BOARDACTIVE CORPORATION,
Patent Owner.

IPR2023-00918
U.S. Patent No. 10,621,620

PETITIONER'S REPLY

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Patent Owner offers many unsupported accusations in its Response, and ultimately presents only one issue worthy of discussion concerning the ‘second’ geolocation—but even that one issue is directly answered by the prior art itself. Each of Felt’s continuous realtime advertising and Adharapurapu’s mobility tracking discloses the related ‘second’ geolocation aspects by examples and by express disclosures. Additional aspects are amply supported by the art. Patent Owner’s complaints are overall illogical and truly argumentative.

I. GROUND 1: FELT

Patent Owner argues that Felt (Verizon) does not disclose the elements of claim 28, but these contentions lack substance and are predicated on false depictions of Felt. RESPONSE (Paper 11), pp. 12-13. Among many perfunctory arguments, Patent Owner asserts that Felt separates content delivery to “consumers” from delivery to “non-consumers” like vehicle displays. RESP., 12. But, Felt actually describes ad delivery as an ongoing and realtime program, using interrelated architectures, and without over constraining itself to fixed arrangements. For example and as further discussed beginning in §I(B), Felt’s ads can be shown on displays 114, vehicles 124, and mobile devices 120 through various architectures, which it likens together expressly and through examples. *E.g.*, EX1004 (Felt), ¶[0028] (ad server 107 “may deliver the marketing content to...wireless device 120, and vehicles 122, 124, 116, ...or display 114.”).

A. Elements 28(a), (a)(i)-(iii), (b)

Patent Owner argues that Felt’s disclosure of these limitations is “impossible” to know from the Petition. RESP., 13. However, the Petition presents each portion of the limitation: “registering asset data” including “registering a first geolocation” associated with “physical assets” (like displays and businesses) and “virtual assets” (like virtual components thereof). PET., 7-8. Notably, only the geolocation is recited for registering, and must be “associated with” physical/virtual assets, amply met by Felt’s “geographical locations” of businesses, displays, etc. Felt, ¶[0028].

Patent Owner next argues that Felt’s categorizing, assigning criteria, storing content isn’t “registering” because (i) Felt’s categorizing constitutes ‘grouping’ and doesn’t include “adding,” and (ii) the criteria and content “are already in the system.” RESP., 14-16. Patent Owner similarly argues “categorization and storage of marketing content” is not registering. RESP., 15-16. Patent Owner ignores Felt’s disclosure that “agencies 104, 106 may provide marketing content to ad server,” which includes “receiving media content” that is “associated with” registered businesses/displays by categorization/assignment of criteria. Felt (EX1004), ¶[0028]; PET., 7-9. Thus, even by Patent Owner’s terms, Felt discloses *registering* by adding categorization/criteria data which is added to the content like addresses and “known geographic locations of, for example, businesses.” *Id.* Although claim 28 recites registering “data” and “a first geolocation,” Felt’s registering asset data

includes registering information about the business, the display, etc., as registered assets, which are themselves associated with their geolocations and also with received media content.

This Panel found that Patent Owner doesn't explain "why the techniques [in Felt] would fail to disclose the identified elements of claim 28" (DECISION (Paper 9), p. 21), and Patent Owner responds, without evidence, that "[r]egistering is adding, categorizing is grouping." RESP., 14. These allegations are unsupported and fail to consider Felt's collective teaching, and arguments that Felt's data organization lacks word-for-word "registration" is improper analysis. DEC., 21 ("Things are not made for the sake of words, but words for things." *Festo Corp. v. Shoketsu* 535 US 722, 731. Nevertheless, Felt even discloses Patent Owner's undemonstrated "adding," as mentioned above.

B. Elements 28(c)-(d)

Patent Owner complains that Felt doesn't use the same literal terms as the claims, but again this argument is premised on improper analysis (*Festo*, 535 US 722), and fails to explain what is lacking. RESP., 18. Patent Owner acknowledges that Felt discloses Element 28(c)(i). *Id.*, ("[Felt] describes a first rule..."), 19 ("User profile data...with the first rule..."). Regarding Element 28(c)(ii), Patent Owner argues that Felt lacks a second rule, and merely applies "the same [first] rule applied at a second location." RESP., 18. At the outset, Patent Owner doesn't explain why

Felt’s profile-associated rule would duplicate its location-associated rule—those rules concern different aspects.

1. “second geolocation”

Patent Owner argues that Felt doesn’t disclose a “second geolocation” (and related aspects like second delivery rule) by reading Felt narrowly to suggest that only Felt’s vehicles receive new ads at new locations, to exclude mobile devices 120 like phones. RESP., 18-19. As discussed below, Patent Owner’s attempts to restrict Felt are illogical, and Patent Owner’s distinction between mobile (vehicle) units 124 and mobile (phone) devices 120 ignores Felt’s realtime ad progression and expressed likening between architectures.

Felt’s disclosure is cumulatively directed to its realtime targeted-advertising program. *See* Felt, Title (“REAL TIME DISPLAY OR DISTRIBUTION OF ADVERTISEMENTS”), ¶¶[0015] (“marketing content...updated based on geography and/or time.”, [0020] (“realtime location of individuals, and the temporal nature of the marketing content.”), [0060] (“marketing content...updated...as the user travels.”) (emphasis added). In one example scenario, Felt applies the user’s profile while walking towards a business location (¶¶[0050], [0053], [0047]). Receiving ads while walking along facilitates Felt’s ongoing ad program (¶¶[0028], [0042]), and its rules collectively target the user moving in time/location with profile-personalized ads to provide user-specific

realtime ads in Felt's walking scenario. *See* Felt, ¶¶[0001]-[0002] (realtime), [0040]-[0041], [0047]-[0049] (profile-based determination), [0064]-[0068]. Patent Owner's suggestion that Felt's users don't move to a second geolocation and experience updated ads is illogical, and ignores Felt's ongoing time/location/profile program for realtime user-targeted advertising.

Patent Owner proposes that Felt's walkthrough discussion of AD1, AD2, AD3 at time/locations 1, 2, 3, applies only to vehicles and not to mobile devices 120 like phones, and that the Petition mixes embodiments because vehicles don't have user profiles. RESP., 18-19. These accusations don't withstand scrutiny. Felt does discuss progressive ads in terms of mobile unit 124, as a van, in paragraph [0042]:

[M]obile unit 124 may display a **first item of marketing content (termed "AD 1" in FIG. 3) at time 1 and location 1. A second item of marketing content ("AD 2") may be displayed at time 2 and location 2, and a third item of marketing content ("AD 3") may be displayed at time 3 and location 3.** For example, a mobile unit traveling through or stationed at Newark Airport around 7:00 AM may display advertisements relating to hotels, car rentals, tourism, nearby restaurants open for breakfast, etc. The marketing content may relate to current specials sponsored by the hotels, car rental companies, or restaurants, for example. Then, as the van heads to Manhattan around 12:00 PM, mobile unit 124 may display marketing content for a local Japanese restaurant that has a current special on sushi, or a local business merely seeking to advertise its name. A few minutes later, around 12:15 PM, as the mobile unit travels near the theater district and Times Square, it may display marketing content for a Broadway musical.

However, Patent Owner improperly reads Felt in a vacuum. First, Felt considers user profiles even with vehicle-based distribution. Felt, ¶[0040]. Nevertheless, Felt’s paragraph 42 provides general illustration of time/location ads, and the van is use merely to dramatize the distance between example locations. In Felt’s realtime ad system, a user walking the same route from Newark Airport to Time Square experiences realtime ad progression via their mobile device 120. Felt, ¶[0050] (“particular marketing content to particular users on the go.”). This includes traveling by bicycle or otherwise with vehicles not equipped as mobile unit 124. Felt demonstrates this equivalent ad progression by directly equating units 124 and mobile device 120.

For example in FIG. 2B annotated below, Felt equates mobile units 124 and mobile devices 120 as each receiving ads directly from server 107. *See also id.*, ¶[0036] (equating units and devices); EX1002, [305]-[306]. These mobile units 124 in FIG. 2B are the very same as in paragraph 42, and in other architectures that Patent Owner proposes to segregate.

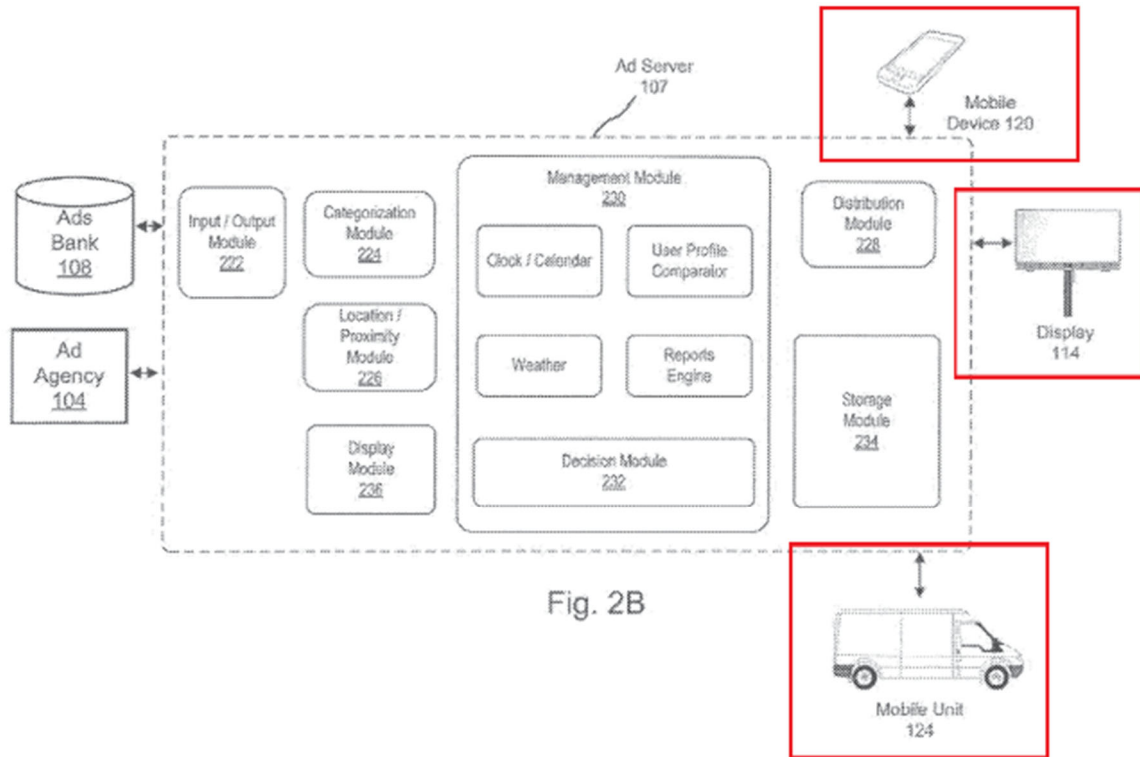


Fig. 2B

Although van 124 can receive/distribute ads, users traveling with mobile devices 120 can *likewise independently receive their own* location/time/profile progressive ads directly from ad server 107. Truly, this ad progression is logically and quintessentially within Felt’s overall realtime target ad program. And, Felt removes all doubt that ad server 107 can “distribute marketing content...directly to mobile units 124, mobile devices 120, and/or displays 114...using similar modules to those explained above, and as shown in FIG. 2B.” Felt, ¶[0040]. Accordingly, Felt makes unequivocal that mobile device ad progression includes updating to ads based on proximity to second location, like its explicit location 2. Felt’s second ads are delivered to the recipient/mobile device user upon fulfillment of the first and second delivery rules (Element 28(g)) by profile and location requirements.

Moreover, Felt's user profiles apply to ads whether communicated directly or indirectly to mobile devices 120. Felt, ¶[0040] (user profiles/settings applied to content "from mobile unit 124 to various mobile device 120" and "directly to mobile units 120."). Felt's decision module 712 "may compare all or a portion of data 800 to user settings and profiles of users." Felt, ¶[0067](emphasis added). Data 800 includes categories/criteria assigned to content, and Felt expressly tethers "exemplary decision module 712 [] such as decision module 212 within mobile unit 124 (FIG. 2A) or a *corresponding decision module 232 within ad server 107 (FIG. 2B).*"). *Id.*, ¶[0064] (emphasis added). Thus, Felt further equates its example architectures specifically in terms of user profile rules.

Nevertheless, although Felt's mobile devices 120 alone amply meet the rule, claim 28 recites the second delivery rule "*associated with* a second geolocation at which the recipient is tracked." The 'association' does not restrict mobile unit 124 from distributing content to the recipient (e.g., mobile device 120) with applied profiling, and thus, Felt's users near a second location receiving profile-targeted ads on their phones 120 meets this term, even if distributed through van 124.

Regarding Element 28(d), Patent Owner reiterates arguments about 28(c), but again reads Felt illogically in insolated partitions. RESP., 19. As discussed above, Felt's realtime program amply addresses "receiving" the indication and "comparing" the first delivery rule. Patent Owner's bold allegation that the Petition has "no text

directly cited in Felt,” ignores explicit citations to “matched,” “user profiles,” “do not track” and “opt in” (PET., 11) and (conveniently) ignores the Petition’s cumulative discussion on Felt’s application of user profiles. RESP., 19; PET., 9 (“[Felt] discloses content delivery dependent upon user profile data, including subscription/opt-in, gender, financials, age, ethnicity, education, etc. *E.g.*, [Felt], ¶¶[0048]; *see also id.*, ¶¶[0040], [0041], [0049] (user profiles/settings before distributing marketing content) [0050], [0053]. Additionally, [Felt] applies relevance weighting of a user’s profile/settings to determine content delivery. *E.g.*, *Id.*, [0041], [0050] (profile). [Felt’s] consideration of user profile data when determining whether/what to deliver specifies the rule for delivering content as recited. DEC., ¶99.”).

C. Elements 28(e)-(g)

Patent Owner relies solely on its earlier positions for Elements 28(e)-(g) and does not set forth any new issues. Questions about “second geolocation” in Element 28(c)(ii) are addressed in §I(B), *supra*, and likewise resolve Patent Owner’s concerns about Elements 28(e)-(g).

D. Claim 29

Patent Owner reiterates its positions on Elements 28(c)(ii) & (f) regarding Elements 29(c)(ii) & (f), now overcome above. Thus, Felt achieves claim 29 on similar basis as claim 28.

II. GROUNDS 2-6: FELT ALONE AND WITH OTHER REFERENCES

Patent Owner rests on earlier arguments about Elements 28(c)(ii) & (f), 29(c)(ii) & (f) to oppose obviousness under Ground 2 and to oppose disclosure of Elements 1(c)(ii) & (h) in claim 1 under Grounds 3-6. RESP., 22-23. But these arguments are overcome as discussed above. Patent Owner tacitly admits that Kerr discloses “registering” and Geer discloses “tracking...in response to” in claims 28 & 29 (and in claim 1 by implication).

A. Ground 2: Felt / Keer / Geer

Patent Owner asserts that motivation lacks for implementing Kerr’s registration in Felt. RESP., 23. However, Patent Owner merely recites the Petition’s exact passages and supporting testimony without any actual analysis or argument about any alleged shortcomings. *Id.* This Panel previously credited motivation to combine Kerr with Felt to “provide ease and control in human-machine interfacing.” DEC., 26.

Patent Owner also asserts that motivation lacks for adding Geer’s tracking into Felt. RESP., 23-25. Felt’s own disclosure for responsive location tracking as to Element 28(e) provides context for combination with Geer to provide tracking “in

response to” a matching comparison to increase resolution while reducing power consumption and data loads.¹

As the Petition explains concerning Ground 1 regarding Element 28(e), Felt discloses “tracking a location associated with the recipient in response to matching comparison.” PET., 11-12. Although strict construction appears unnecessary, from plain reading of the claim, “a location” is loosely tied to “recipient” by the phrase “associated with,” and this feature includes tracking a user’s present location. Tracking must be *in response to* the “matching comparison” which is also itself not strictly defined, but includes profile data matching/fulfilling the first rule. Felt discloses these aspects by its profiles/settings including “do not track”/“opt-in” options such that profiles must “match” the requirement to opt-in before tracking occurs. Felt, ¶[0041]; PET., 11. And Felt’s profiles/settings are “continuously monitored” for immediate effectiveness such that *in response to* toggling for newly opting-in user tracking initiates. Felt, ¶[0050].

Felt also tracks consumer location concerning ad interaction, weighting interactivity as ad relevance. For example, Felt weights “physically traveling” to a business location as “act[ing] upon” ads that were meaningful. Felt, ¶[0050](physically traveling, acted upon), [0053]. Thus, Felt *tracks a location of*

¹ Foursquare clarifies typographical error on page 15 of the Petition which should have read “...responsiveness in tracking above concerning Element 28(e),” rather than referring to Element “28(c)”.

the consumer approaching the business, and this tracking is *in response to matching comparison* also by Felt's "do not track"/"opt-in" profiles/settings which tracks only when opted-into. PET., 12; EX1002, ¶[104].

Although Felt's tracking is "in response to" profile matching comparison with opting-in, if that tracking were considered not *directly resultant* from matching comparison, Geer's geolocation-based communications system initiates high-resolution ("HIRES") tracking *in response to* matching comparison that the user qualifies as a "fan." EX1006 (Geer), ¶¶[0057] (changing geolocation resolution "consistent with the state 1400 of the fan 200."), [0074] ("current state 1400 of a fan 200"); EX1002, [110]-[111].

Geer discloses information management system (FNMS) 310 communicating with "personal smart devices" ("PSDs") 320 including mobile phones/computers, FIG. 3 below. Geer, ¶¶[0003], [0044]; EX1002, [81]-[83].

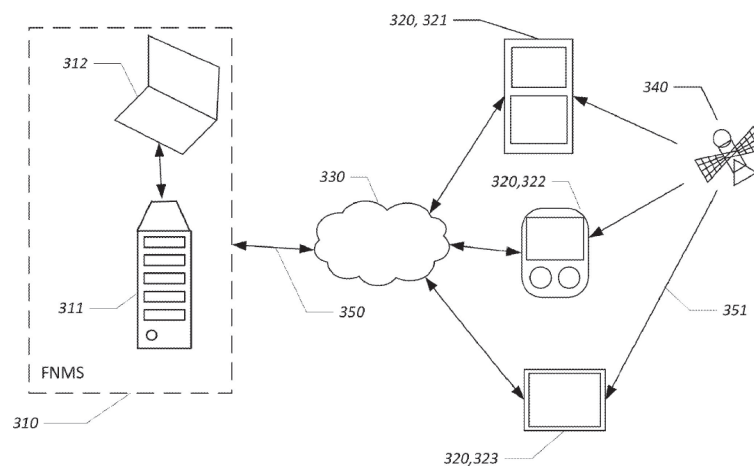


FIG. 3

In one architecture, Geer initiates HIRES tracking near areas like baseball stadiums to increase resolution about the user's location, which can enhance relevance of messages like ads. Geer, Abstract, ¶¶[0006] (coupons), [0065] (HIRES tracking affords detailed geolocation for coupons), [0074], [0089]; *see also id.*, [0047], [0081], FIG. 16 (advertisements). Adding location resolution improves reliability that users actually attend the interest area. *Id.*, [0005], [0064] (confirming attendance by HIRES). However, HIRES tracking consumes significant resources, and Geer doesn't apply HIRES tracking everywhere for each user, but considers the users' profile.

Geer uses HIRES tracking when “consistent with the state 1400 of the fan,” to conserve power when high location resolution is irrelevant. Geer, ¶[0057]. Geer determines the state 1400 of the user-fan partly based on whether the fan is ‘affiliated’ with a particular team. *Id.*, ¶[0074] (“state of fan 200...team affiliation.”). Thus, ballgames between teams unaffiliated with fan 200 are irrelevant, and HIRES tracking is denied. EX1002, [111] (“Geer discloses prompting HIRES tracking when the user profile data, including affiliations...match in comparison.”). Geer's location tracking in response to a matching comparison would have been implemented in Felt to add resolution while reducing power consumption and/or data loading/processing, and/or for improved relevance in communications. *Id.*

Patent Owner argues that (1) Geer is directed to fan experience and not advertising, (2-3) Felt's various devices don't always have power concerns like battery needs, (4) Felt doesn't need or wouldn't be improved by better resolution, (5) Geer concerns social networking more than ads, (6) and that Geer concerns a general predetermined location while Felt doesn't concern destinations. RESP., 24-25.

Patent Owner's arguments about dissimilarities between references doesn't address analogous art issues. Yet, Geer, like Felt, concerns actively-updated location-based communications, and even location-based advertising. Thus, Geer's location-ad-communications is (i) from the same field of endeavor as the claimed invention, and (ii) reasonably pertinent to the problem faced by the inventor in location-based communications like advertising. *In re Bigio*, 381 F.3d 1320, 1325 (Fed. Cir. 2004). Patent Owner's mischaracterizes Geer as purely social networking, and ignores Felt's social media/networking (Felt, ¶¶[0047]-[0048], [0056] (hashtags), [0061] (share)). RESP., 24.

Patent Owner insincerely argues that no evidence establishes Felt's battery issues, imprecision, or improved results. RESP., 24. Felt is not required to provide independent motivation. *KSR Int'l Co. v. Teleflex Inc.*, 550 U.S. 398 (2007) (reversing TSM test). Nevertheless, Dr. Goldberg's testimony and Geer itself articulate motivation for improved resolution and/or power consumption with

rationale underpinning. *Id.*; EX1002, ¶¶[110]-[111]; PET., 15-16. Dr. Goldberg’s testimony also credits reduced data. *Id.*

Concerning Geer’s alleged “general predetermined location,” and questions about why Felt would reduce power “when that geofence area is not the destination;” Felt expressly uses proximity/profiles for targeted advertising and Geer’s modification for directly responsive tracking fans near profile-affiliated locales fittingly adds improved resolution, reduced data/power consumption within Felt’s program. RESP., 25; Felt, ¶¶[0027], [0036]; EX1002, ¶¶[299]-[301]. Patent Owner fails to explain why Felt/Geer’s geolocations exclude destinations, such as businesses or ballparks mentioned (Felt, ¶[0053]; Geer, ¶[0058]).

Patent Owner also argues that a net power increase would occur. RESP., 25. Patent Owner fails to offer any evidence, but ignores Geer’s specific disclosure and Dr. Goldberg’s testimony crediting the values of increased resolution, power and/or data loading/processing conservation. PET., 14-15; EX1002, [110]-[111].

B. Ground 3: Felt

Patent Owner argues that Thaper (Cellco) is not asserted against claim 1 and wouldn’t combine with Felt to achieve various features. Patent Owner overlooks that Thaper is available as wholly within Felt. “[L]ocation of the mobile unit or mobile device may be determined...[as] described in U.S. Pat. No. 8,391,886, assigned to Cellco...incorporated herein by reference in its entirety.” Felt, ¶[0027].

Patent Owner generically concludes that Felt/Thaper fail to teach all elements of dependent claims 2-6 and 11-27, but omits supporting evidence/arguments and simply asserts that Thaper doesn't cure earlier issues. RESP., 26-27. Patent Owner, thus, fails to raise meaningful dispute about Felt and Thaper.

C. Grounds 4-5: Felt / Muhire / Kerr

Patent Owner argues that Muhire is non-analogous. RESP., 27-28. However, Patent Owner's only argument—that “tools to save money accessible from a touchscreen”—doesn't explain why Muhire is unavailable. As this Panel credited, Dr. Goldberg regards Muhire in the same field within “similar sector of technology” about delivering media via online electronic systems, just as Felt concerns electronic advertising platforms. DEC., 31; EX1002, [163]-[164]. Patent owner insists that Muhire isn't “reasonably pertinent,” without any analysis/arguments or explanation. RESP., 27. Yet, Muhire implements server/databases, and Dr. Goldberg believes Muhire is quite relevant to electronic advertising systems. Muhire, ¶[0050]; EX1002, [164]. Accordingly, Muhire is analogous art under *In re Bigio*, and Patent Owner fails to demonstrate otherwise.

Patent Owner argues that motivation lacks for combining Muhire with Felt, and also with Kerr. RESP., 28. As this Panel already highlighted, Dr. Goldberg addressed benefits of Muhire, including benefits of segmenting, organizing, and

indexing to ease in development. DEC., 31; EX1002, [164]. Patent Owner offers no additional analysis/argument concerning Kerr.

D. Ground 6: Felt / Kerr / Muhire / Sehn

Patent Owner argues that Elements 1(c)(ii) & (h) aren't cured by Kerr, Muhire, or Sehn. RESP., 28. Yet, as discussed above, Felt discloses these limitations. *Supra*, §§I-II(A).

Patent Owner reiterates its argument that combining Felt, Kerr, and Muhire is improper and adding Sehn doesn't help. *Id.* As discussed above, this Panel credited Felt and Muhire as analogous, and Patent Owner offers no further arguments/support regarding why the references would not combine. *Supra*, §II(C).

Patent Owner argues that Sehn is about brand endorsement, and wouldn't be combinable, or chosen over other references. RESP., 29. Patent Owner makes no attempt to support or even rationalize its arguments which defy commonsense that brand endorsement equates with advertising, which concern art readily combinable for business information considerations, and which cite no authority that obviousness requires to "choose Sehn rather than any other reference." Patent Owner asserts that "benefits in administrative level control and access...in consideration of additional identifiers," is irrelevant, but fails to provide any logic or to consider Dr. Goldberg's concurrence. PET., 40; EX1002, [169]-[173].

III. GROUNDS 7-13: ADHARAPURAPU ALONE AND WITH OTHER REFERENCES

Patent Owner presents a single argument opposing Adharapurapu (Alcatel) with Kerr, regarding claims 1, 28, and 29—that Adharapurapu fails to teach Elements 1(c)(ii)&(h), 28(c)(ii)&(f), and 29(c)(ii)&(f) concerning the ‘second rule’ associated with second geolocation. RESP., 31. Patent Owner argues, in sum, that Adharapurapu sends information based on direction of travel, and therefore no second geolocation is applied to update content. RESP., 31. Patent Owner’s arguments are misplaced.

A. Ground 7: Adharapurapu and Kerr

At the outset, Element 1(c)(ii) (and corresponding Elements 28(c)(ii)&(f) and 29(c)(ii)&(f)) only requires ‘a second rule’ being “*associated with* a second geolocation.” Patent Owner ignores the explicit disclosure in Adharapurapu that relies on a second location, and also the logical use of the second location in determining direction. For example, the Petition presents with support from Dr. Goldberg, that Adharapurapu’s uses a second location, such as traveling from station A, to another location (station) D, and then to another location (station) C. PET., 46; EX1002, [188]-[189]. Adharapurapu discloses sending content to the mobile device 107 for shops or restaurants *associated with* these locations and based on travel. *Id.*; *see also* Adharapurapu, ¶¶[0018], [0020]-[0022]. As a further example, different

content would be sent to the mobile device based on several different example travel routes with different ‘second’ locations. Adharapurapu, ¶[0020].

Adharapurapu removes all doubt in paragraphs 18 and 20-22; Paragraph [0018] explicitly states “[a]s the mobile device keeps moving *from one location to another*, tracker base stations *in every location* register the mobile device.” Adharapurapu, ¶[0018] (emphasis added). Adharapurapu further states, “[w]ith 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 along with *content information of restaurant R2* alone. Adharapurapu, ¶[0021]. Thus, based on the mobile device’s location, advertisements for restaurants R1 and R2 are sent to the mobile device. To the extent Patent Owner takes issue with advertisements for both restaurants R1 and R2 being sent, Patent Owner fails to demonstrate that claim 1 restricts two advertisements from being sent to the mobile device, and regardless media is sent pursuant to a rule based on the mobile device’s *location*.

Moreover, as this Panel credited with regard to the similar limitation for Element 28(c)(ii), Adharapurapu teaches this limitation because “Adharapurapu appears to ‘track[]’ the location of a ‘recipient’ (e.g., a mobile device).” DEC., 43, (citing Adharapurapu ¶[0018] (“As the mobile device 107 keeps moving from one location to another, tracker base station in ever location register the mobile device.”)).

Patent Owner argues that “heading” to a second location is direction and not the claimed second geolocation. RESP., 31-32. However, Adharapurapu applies user location in proximity to the areas of interest, like shops and restaurants, via the stations, and the stations themselves and the interest areas each can define the relevant second geolocation merely “associated with” the second rule, including user being nearby. PET., 47.

Patent Owner next argues that Kerr fails to cure the Element 1(c)(ii) deficiency of Adharapurapu. RESP., 33. As discussed above, Adharapurapu (Alcatel) provides ample disclosure of this element, rendering Patent Owner’s arguments without merit.

Patent Owner next argues that the Petition fails to demonstrate motivation to combine Adharapurapu with Kerr. RESP., 33. Patent Owner cherry-picks a single introductory statement in the Petition’s but ignores the through discussions which follow. For example, Patent Owner ignores the Petition’s arguments that “in the same technology area, Kerr discloses tailored content delivery with location tracking [and] user interaction [providing] user-subjective information/feedback for improving the accuracy, reducing noise, and enhancing efficiency.” PET., 42, 46; EX1002, [180]. The Petition further states:

POSITA would have found it obvious to have implemented Alcatel’s operations (as modified with Kerr’s content interaction for stated benefits above) in different layers, as recited, and thus to receive media

content configured and enable operations as recited, for the benefits of segmenting, organizing, sequencing, and/or indexing, affording ease in development, debugging, implementation, and/or updating to tailored content provisions.

PET., 45; *see also* PET., 48-50 (motivation to combine). And, this Panel credited that the Petition “sufficiently show[s] a reason supporting the combination of Adharapurapu with Kerr.” DEC., 35.

B. Ground 8: Adharapurapu / Kerr / Muhire

Patent Owner argues that Kerr and Muhire fail to cure the Element 1(c)(ii) deficiency of Adharapurapu. RESP., 34. As discussed above, Adharapurapu provides ample disclosure of this element, overcoming Patent Owner’s arguments.

Patent Owner next argues that Muhire is non-analogous art. However, Patent Owner’s single-sentence contention that “[t]ools to save money accessible from a touchscreen on a refrigerator is non-analogous art” (RESP., 34) fails to establish that Muhire is from another field of endeavor or impertinent to the problem faced. As this Panel determined, the Petition established an adequate basis for combining the references. DEC., 36. More specifically, for example, the Petition sets forth that “in similar area of technology, Muhire teaches use of separate layer” about delivering media via online electronic systems, that a POSITA “would have appreciated Muhire to disclose different layers,” doing so at least “for the benefits of segmenting,

organizing, sequencing...affording ease in development, debugging, implementation....” PET., 57-58.

C. Ground 9: Adharapurapu / Kerr / Felt

Patent Owner argues that Kerr and Felt fail to cure Adharapurapu’s alleged Element 1(c)(ii) deficiency. RESP., 35. As discussed above, Adharapurapu provides ample disclosure of this element, overcoming this issue.

Patent Owner next generically argues that no motivation to combine has been shown for the combination of Adharapurapu, Kerr, and Felt. Patent Owner’s arguments are a single sentence without any explanation, support, or analysis, and thus fail. Moreover, the Petition explains that Felt discloses mobile assets (claims 2-6) and content interactivity as particular paths (claims 22-27), which a POSITA would have combined with Alcatel to add flexibility/adaptability and to improve accuracy, reduce noise, and enhance efficiency, respectively. PET., 59; EX1002, [214]-[216]. Accordingly, this Panel credited that the Petition established “an adequate basis for combining the references cited in Ground 9.” DEC., 37.

D. Ground 10: Adharapurapu / Kerr / Muhire / Felt

Patent Owner argues that Kerr, Muhire, and Felt fail to cure the Element 1(c)(ii) deficiency of Adharapurapu. RESP., 36. As discussed above, Adharapurapu provides ample disclosure of this element, therefore Patent Owner’s arguments are moot.

Patent Owner next argues that Muhire is non-analogous art, contending that “[t]ools to save money accessible from a touchscreen on a refrigerator is non-analogous art” (RESP., 36), and that there is no evidence of motivation to combine. The same reasons above in Ground 8 apply to Ground 10 and Adharapurapu, and the Petition articulates why Muhire is analogous art, and motivation exists to combine Muhire with the other references.

E. Ground 11: Adharapurapu / Kerr / Muhire / Felt / Sehn

Patent Owner argues that Kerr, Muhire, Felt and/or Sehn fail to cure Adharapurapu’s alleged Element 1(c)(ii) deficiency. RESP., 37. As discussed above, Adharapurapu provides ample disclosure of this element, overcoming the issue.

Patent Owner next reiterates its arguments that Muhire is non-analogous art, regurgitating its single-line contention from its prior arguments—that “[t]ools to save money accessible from a touchscreen on a refrigerator is non-analogous art.” RESP., 37. As reviewed above in §III(B), the Petition supports Muhire is analogous and why a POSITA would be motivated to combine it and the other references.

F. Ground 12: Adharapurapu

1. Element 28(a)

Patent Owner argues that Adharapurapu does not adequately use the term ‘register,’ and delivers content based on direction when the claim requires content delivery based on *location*. RESP., 39-40. As the Panel properly credited,

Adharapurapu “employs correlations between particular geolocations and particular related physical assets, such as restaurants — i.e., the subject matter that Petitioner identifies as “registering” “geolocation[s]” associated with physical assets.” DEC., 40-41, citing Adharapurapu ¶¶[0015]-[0020], Fig. 3. Adharapurapu’s content delivery is based on requirements of base station and related geolocations, which concern relevant geolocations of interest, such as physical assets of restaurants R1 and R2. PET., 61, citing Adharapurapu ¶¶[0015]-[0017], [0021]. Accordingly, the Petition sufficiently demonstrates that Adharapurapu discloses this limitation.

2. Element 28(b)

Patent Owner argues that the Petition fails to specifically identify Element 28(a), but ignore that Adharapurapu expressly receives content “sent by the content publishers.” Adharapurapu, ¶[0017]; also [0002], [0007]; RESP., 40.

3. Element 28(c)

Patent Owner mischaracterizes that the Petition as “only cit[ing] to paragraph 0017” for these elements, yet paragraph 17 broadly discloses a rules processor 204. Patent Owner further argues that Adharapurapu’s paragraph 17 discloses rules based only on the position of the tracker base. RESP., 41. However, Adharapurapu discloses tracking the mobile device 107, using the base stations to determine where the mobile device 107 is located and along what route it travels according to point locations. For example, paragraph 18 explicitly states “[a]s the *mobile device* keeps

moving *from one location to another*, tracker base stations in every location *register the mobile device.*” (emphasis added). This is consistent with this Panel’s findings that Paragraph 17 discloses “the location of a ‘recipient’ (i.e., a mobile device) is ‘tracked,’ in order to determine that it is in the vicinity of the road.” DEC., 42.

Patent Owner next argues that paragraph 18 does not identify a second location because of an “inference.” RESP., 41. As discussed above for Element 1(c)(ii), Adharapurapu discloses a second delivery rule and second location, and rather the inference is merely the movement line. Paragraph 18 explicitly states “[a]s the mobile device keeps moving *from one location to another*, tracker base stations *in every location* register the mobile device.” Adharapurapu, ¶[0018] (emphasis added). Adharapurapu further states, “[w]ith 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 along with *content information of restaurant R2* alone. Adharapurapu, ¶[0021]. Thus, based on the mobile device’s location, advertisements for restaurants R1 and R2 are sent to the mobile device. To that end, as the Panel credited, Adharapurapu’s paragraph 18 is not teaching an inference of the mobile device’s location, but its path. DEC., 43.

4. Element 28(d)

Patent Owner takes Adharapurapu’s paragraph 17 and the petition out of context, arguing that disclosure of a closed road fails to teach this limitation. RESP.,

42. But paragraph 17 discloses “a set of rules based on the days specified, time specified, and location of the tracker base” so that a message can be sent to “*mobile devices* that are in the **vicinity of the road.**” Adharapurapu ¶[0017] (emphasis added). This Panel credited that “Adharapurapu (Alcatel) satisfies Element 28(d), at least by checking the subscription status of the mobile device, based upon proximity to a geographic location.” DEC., 43. This Panel also credited that Adharapurapu discloses information about movement of the mobile device is tracked by the base station. DEC., 44. Nevertheless, Patent Owner fails to address Adharapurapu’s many other examples of “receiving” first indication and “comparing” profile data. *E.g.*, Adharapurapu, ¶¶[0020], [0022].

5. Element 28(f)

Patent Owner addresses Element 28(f) only by alleging Adharapurapu “fails to teach claim 28 element 28(c)(ii).” RESP., 42. As discussed above, Adharapurapu does disclose Element 28(c)(ii). *Supra*, §III(F)(3). Therefore, Patent Owner’s argument is overcome and/or moot. Moreover, as this Panel credited, “Adharapurapu (Alcatel) appears to teach [Elements] 28(e)-(f).” DEC., 45.

6. Claim 29

Patent Owner cross-references earlier arguments to oppose claim 29 concerning Adharapurapu, but those arguments are overcome above. *E.g.*, §§III(A), (F)(1)-(5).

G. Ground 13: Adharapurapu / Keer / Geer

Patent Owner contends that Keer and Geer fail to cure the alleged deficiencies of Adharapurapu concerning Elements 28(c)(ii) & (f) and 29(c)(ii) & (f). RESP., 38. As discussed above, Adharapurapu provides ample disclosure of these similar elements, therefore Patent Owner's arguments are overcome and/or moot. *Supra*, §§III(A)&(F).

Patent Owner also argues, without any basis or explanation, that the Petition lacks a motivation to combine. RESP., 38. To the contrary, and as credited by this Panel, the Petition "establishes an adequate basis for combining the cited references" in Ground 13. DEC., 47. Clarification concerning Geer's teachings has been addressed above, *supra* §II, and applies equally to Adharapurapu as to claims 28 and 29. Geer's addition to Adharapurapu of HIRES tracking in response to matching comparison provides "improve[d] resolution," reduced energy and/or data, and/or "associated benefits to accurate, low noise and efficient communication in targeted ads." PET., 67-68. Accordingly, Patent Owner's arguments are unsupported and overcome.

Throughout the entire Response, Patent Owner's many cross-references to rely on arguments about certain claims to oppose similar features in an otherwise unrelated claim; cross-references to argue only that additional art doesn't address issues already argued in other grounds; and/or cross-references to rely on arguments

for independent claims regarding dependent claims, are each addressed in the same manner as the cross-referenced issues, whether explicitly stated or not.

IV. CONCLUSION

Accordingly, Patent Owner's attorney argument, devoid of legitimate support, cannot rebut the meaningful evidence presented by Foursquare. A preponderance of record evidence demonstrates unpatentability of claims 1-29 of the '620 patent.

May 16, 2024

Respectfully submitted,

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CERTIFICATION UNDER 37 C.F.R. § 42.24(d)

The undersigned certifies, pursuant to 37 C.F.R. §42.24(d), that the word count for the foregoing this PETITIONER'S REPLY totals 5,509 and within the 5,600 words allowed under 37 C.F.R. §42.24(c)(1).

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CERTIFICATE OF SERVICE

The undersigned hereby certifies that a copy of the foregoing PETITIONER'S
REPLY and accompanying exhibits, were served on May 16, 2024, to the following
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