

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

FOURSQUARE LABS, INC.,
Petitioner

v.

BOARDACTIVE CORPORATION,
Patent Owner

U.S. PATENT NO. 10,692,108 B1

Title: PLATFORM FOR LOCATION AND TIME BASED ADVERTISING

IPR2023-00919

PATENT OWNER'S SUR-REPLY

June 27, 2024

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<i>Wyers v. Master Lock Co.</i> , 616 F.3d 1231, 1242 (Fed. Cir. 2010)	1

TABLE OF EXHIBITS

Exhibit	Title
1001	U.S. Patent No. 10,692,108 to Pittman (“Pittman”)
1002	Declaration of Dr. Steven Goldberg, Ph.D.
1003	Petitioner’s Power of Attorney
1004	U.S. Patent Application Publication No. 2015/0095124 (“Felt”)
1005	U.S. Patent Application Publication No. 2015/0262214 (“Geer”)
1006	U.S. Patent Application Publication No. 2011/0171976 (“Creemer”)
1007	U.S. Patent No. 9,516,470 (“Scofield”)
1008	European Patent Publication No. 2424278 A1 (“Adharapurapu”)
1009	Second Declaration of Dr. Steven Goldberg, Ph.D.
2001	U.S. Patent No. 10,692,108, file history
2002	The GSM System for Mobile Communications
2003	3GPP TS 45.008 V5.11.0 (2003-06)
2004	Declaration of Craig Bishop

On Reply, Petitioner accuses Patent Owner of offering “many unsupported accusations,” Paper 12 (Reply) p.1, but Petitioner fails to identify where such support is lacking. Contrary to Petitioner’s assertion, Patent Owner points out what the references teach and describe and where Petitioner’s arguments depart from the references’ clear teachings. That Patent Owner does not rely on an expert does not make Patent Owner's positions unsupported. An expert is not required in inter partes reviews. *See Wyers v. Master Lock Co.*, 616 F.3d 1231, 1242 (Fed. Cir. 2010) (“Even in court, we have said, expert testimony is not required when the references and the invention are easily understandable.”) Depending on the complexity of the art, Board members may be able to easily understand and “soundly explain” the prior art without help from experts. *See e.g., Belden Inc. v. Berk-Tek LLC*, 805 F.3d 1064, 1079 (Fed. Cir. 2015) (The Board members can easily understand and soundly explain the teachings and suggestions of the prior art without expert assistance. Such is the case here. But even where the record contains such testimony, the Board must weigh that testimony against other record evidence in reaching its conclusion, and it may give that testimony less weight, so long as the Board supports its decision with substantial evidence. *See also Trs. of Columbia Univ. v. Illumina, Inc.*, 620 F. App'x 916, 922 (Fed. Cir. 2015) (unpublished) (“The PTAB [is] entitled to weigh the credibility of the witnesses in light of their qualifications and evaluate their assertions accordingly.”) (citations omitted)). Thus, even if the record contains

expert testimony, the law does not require the PTAB to rely upon it, especially where that testimony is contrary to the clear disclosure of the prior art of record. *Id.* at 1079-1080.

**I. GROUND 1: NON-ANTICIPATION BY FELT (VERIZON);
GROUNDS 2-5: NONOBVIOUSNESS BY FELT, AND BY
FELT AND OTHER REFERENCES**

A. Independent Claim 1

Petitioner's argument mischaracterizes what is actually disclosed in Felt (Ex. 1004). Petitioner cites paragraphs [0015] and [0020] allegedly to support of Felt's "disclosure of realtime targeted-ad program." Paper 12 (Reply), p. 3. Specifically citing paragraphs [0015] for "marketing content...updated based on geography and/or time," and [0020) for "updated base on geography and/or time." *Id.* What paragraph [0015] actually states is:

As used herein, the term "marketing content" is interpreted broadly to include any type of information that a sponsor or service provider may elect to send to a mobile device, a mobile unit, a stationary device, or an individual. Thus, marketing content can include, but is not limited to, offers for goods or services, incentives, coupons, requests for charitable donations, requests for information, general information not associated with an offer or request, etc. *The marketing content is capable*

of being updated based on geography and/or time of display, and is therefore, preferably, in a digital format.

Felt, ¶ 0015 (emphasis added). Marketing content is described as being “updated,” not distributed. Claim element 1(b) requires “rules for the content distribution campaign,” not rules for updating content independent of distribution. And

paragraph [0020] provides:

Entities that employ targeted marketing face various challenges including the cost-effectiveness in identifying potential customers most likely to be differentially more receptive to the marketing content; getting those potential customers to pay attention to the marketing content; identifying the location where the marketing content should be sent to reach those individuals; and identifying the time when individuals are most likely to be receptive to the marketing content. ***Responding to these challenges requires the acquisition and processing of information associated with receptiveness, realtime location of individuals, and the temporal nature of the marketing content.***

Felt, ¶ 0020 (emphasis added). Paragraph [0020] discusses “acquisition and processing of information”; it does not mention the content delivery rules as required in element 1(b). Patent Owner points out, as noted in the Response, that Petitioner once again uses string cites and leaves it up to the Board to make the

connection between the claim elements and Felt's disclosure. *See also* Paper 10 (POR), p.11. Indeed, Petitioner does even cite to the '108 claim elements in section I.A.2 of the Reply. *See* Paper 12 (Reply), pp. 3-4.

Instead, Petitioner talks about the purported "activation of individual rules over time," i.e., real-time, but that fails to meet the claim language, which requires (using claim 1 as an example) element 1(b)(iii), "specifying a third rule corresponding to a course of travel associated with the consumer," with 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. *See* Petition, p. iv. The ultimate issue is whether Felt teaches or describes the claim elements. Yet, Petitioner uses proxy language, which is different from and does not represent the claim limitation, nor is it even found in Felt. First, Petitioner asserts that Felt paragraph [0036] discusses "continued travel," yet that term is never mentioned in the '108 Patent or in Felt. Rather, what Felt discusses is "proximity data";

Proximity data may comprise a radius around mobile unit 124 or display 114, such as a radius of 200', 100', 50', or 10'. Proximity may be dependent on multiple factors, including specifics of the ad providing unit (e.g., type, size, location, speed of the mobile

unit/display) and other nearby ad providing units, of the ad receiving unit (e.g., speed/direction of travel of the mobile device, specifics of the mobile device user), and of environmental conditions (e.g., rain, high smog day).

Felt, ¶ 0036. Proximity data is specific data about proximity, which is different than “continued travel” data as read into the reference by Petitioner. Felt provides no disclosure of additional advertising being provided based on “speed/direction/manner” as required by claim element 1(f) (determining the course of travel “based, at least in part, on an analysis of the first location and the second location”). Ex. 1001, 38:65-66. Contrary to Petitioner’s assertion, paragraphs 0042-0043, 0053 of Felt all require proximity data and not data relating to speed/direction/manner. Paper 12 (Reply), p.7.

Further, simply stating that Felt discloses a “second” indication because the mobile device has traveled to a new location fails to meet the claim limitation 1(f) “determining the course of travel based, at least in part, on an analysis of the first location and the second location.” Ex. 1001, 38:65-66. Felt fails to DETERMINE a COURSE OF TRAVEL, which is required to be based, in part, on an ANALYSIS of “the first location and the second location.” But Felt provides no disclosure about an analysis of the second location. The only teaching in the Felt publication is proximity, not course of travel, as required in claim 1.

Petitioner further asserts that “Patent Owner offers no explanation on how Felt would determine speed/direction from a single point” and that Dr. Goldberg asserts that GPS point comparison is unremarkable and known within Felt. Paper 12 (Reply), pp. 4-5. First, it is not Patent Owner’s burden to explain how speed and direction can be determined from a single point. Felt’s failure to disclose a the claimed “second location” to determine the claimed “course of travel” cannot be remedied by Dr. Goldberg’s general reference to GPS unremarkabililty. *Id.* Second, Felt does not disclose how speed and direction are determined. Third, and most importantly, “[w]hile those indicators may be considered to determine course of travel, the plain language of the claim also requires consideration of a separate indicator, i.e., an “analysis of the first location and the second location,” Paper 10 (POR), p.19.

Petitioner’s argument also erroneously asserts that mobile units, such as mobile unit 124 (non-consumer vehicle) are the same as mobile devices 120. A person in a car or walking can have a mobile device, such as a cellular phone. However, the Felt publication describes non-consumer mobile units as vans and buses displaying digital signage. The paragraph [0036] of Felt, cited by Petitioner, explains an embodiment that “[d]isplaying particular marketing content on mobile unit 124, and/or display 124 while in the area of a mobile device 120.” The mobile unit 124 is displaying information to the mobile device 120. However, the media

content of claim element 1(a)(ii) requires “media content associated with the geolocation” See Ex. 1001, 38:48. Felt’s “displaying particular marketing content on [commercial] mobile unit 124” display is not based on the geolocation of consumer mobile unit 120; rather, it is associated with the proximity of mobile unit 124 to the mobile device 120.

Indeed, review of claim 1’s limitations provides that the “course of travel” is associated “with the consumer.” Mobile unit 124 is not a “consumer,” rather, it is a commercial vehicle that displays advertisements. So even if the “course of travel” could be determined for mobile unit 124, it still would not satisfy limitation 1(b), which requires that the claimed “course of travel” is that of the consumer. Ex. 1001, 38:56-57. Further, Petitioner provides no analysis of how element 1(f) (“determining the course of travel based, at least in part, on an analysis of the first location and the second location” of the claimed consumer) is satisfied by Felt’s consumer mobile unit 120, because it is not.

Instead, Petitioner attempts to mislead the Board by asserting that mobile unit 124 (non-consumer vehicle) is “biking/unequipped car.” See Paper 12 (Reply), p.6. Neither “bike” or “biking” appears in the Felt (Ex. 1004). Nor does “unequipped” appear in Felt (Ex. 1004). Instead, Felt purposefully limits mobile unit 124 to a subset of vehicles used to display ads as it drives around and not personal non-consumer vehicles:

Other various components may also be communicatively coupled with the network 102 or network element 110, such as vehicles 116, 122, 124, or display 114. Vehicles may include a personal automobile 116, bus 122, van 124, or any other vehicular devices including, but not limited to, [non-consumer vehicles, such as] semi-trucks, city transit buses, subway cars, trolley cars, construction vehicles, etc.

Felt, ¶ 0021. Felt describes a commercial van as used as mobile unit 124. *See Id.* But also uses reference numeral 124 in different embodiments to mean a subset of vehicles, a mobile device, mobile mats, consumer's vehicle with external signage, and a display (collectively, "non-consumer vehicles"). *See Felt* ¶¶ 0021, 0028, 0050, 0064, 0045, 0036. Indeed, everywhere that Felt describes mobile unit 124, it is for use in displaying external signage or advertisements. *Id.* Felt never discloses that its non-consumer vehicles are also "eligible for the content distribution campaign when the plurality of rules is satisfied." Ex. 1001, 39:1-3. And, Petitioner does not elaborate on how these non-consumer vehicles satisfy the plurality of rules. For example, the "second rule corresponding to at least one element of profile data associated with a consumer" is not associated with non-consumer vehicles in Felt. *See Ex. 1001*, 38:53-55. Similarly, the claimed "course

of travel” must also be “associated with the consumer,” not a non-consumer vehicle. *Id.* 38:56-57.

Based on Felt’s specification, Patent Owner interprets mobile unit 124 as a moving display, such as a van or other moving vehicle, and the vehicle must support a decision module 712:

Referring to FIGS. 7-8, an exemplary decision module 712 is shown, such as decision module 212 within mobile unit 124 (FIG. 2A) or a corresponding decision module 232 within ad server 107 (FIG. 2B). Elements 1001-1012 represent items of marketing content that decision module 712 may distribute to mobile devices 120 a-120 n or mobile unit 124 n. Decision module 712 may also distribute marketing content to various mobile mats 124 or displays 114. Labels “A”-“L” on elements 1001-1012 may represent data or instructions 800 (FIG. 8) tagged to the particular items of marketing content. Such data 800 may be in the form of metadata and may comprise categories and/or criteria assigned to individual items of marketing content 1001-1012.

Felt, ¶ 0064. The decision module 712 may be in the mobile unit 124 or an ad server 107. Nowhere does the Felt publication teach or describe the decision module 712 being in a consumer mobile device 120. The location of the

decision module 712 demonstrates that a mobile device 120 differs from a mobile unit 124 (or any other term used with reference number 124).

Similarly, Felt describes the display being active on mobile units 124 at only low speeds:

Marketing content displayed on this and other types of mobile units 124 may be non-distracting to other drivers. For example, the marketing content may be limited to being displayed when mobile unit 124 is stopped or traveling at very low speeds, such as less than 5 mph. Then when mobile unit 124 begins to travel again, the display may go blank until mobile unit 124 stops again. Accordingly, the rate of movement of mobile unit 124 may be taken into account when assigning criteria to marketing content and when displaying the marketing content on mobile unit 124.

Felt, ¶ 0045. This paragraph further establishes that mobile unit 124 is a moving display and not the claimed “consumer.”

B. Independent Claim 20.

Even if Felt’s proximity to a first location and then proximity to a second location, may each have a message, the language of independent claim 20 Element 20(d)(ii) requires “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.” Petition, p. viii. Petitioner asserts that “Felt also considers

user actions ‘upon’ content, e.g., physically approaching a business. Felt, ¶0053.” See Paper 12 (Reply), p.17. But, as Petitioner suggests, if the action of element 20(d)(i) of “a first rule corresponding to a consumer’s location in association with a registered asset,” which Petitioner calls “physically approaching,” correlates to Felt’s general description of “proximity” then element 20(d)(ii) requiring a “second rule corresponding to at least one action performed by a consumer during course of travel related to the consumer’s location in association with the registered asset,” cannot also be “[c]onsumers taking course of travel to exemplary Road X...receive a first message about road X,” (Paper 12, p.24), i.e. “proximity” to Road X. It makes no sense to use “physically approaching” a business as a rule for some claim elements and then change back a course of travel for other elements in the same claim.

II. GROUNDS 6-7: NONOBVIOUSNESS BY ADHARAPURAPU WITH FELT, AND THEN BY ADAHARAPURAPU WITH FELT & GEER

Regarding Elements 1(e)-(f), Petitioner mistakenly asserts that Ex. 2003 is “unreliable” because the document has not been “subject to any approval process by the 3GPP Organizational Partners” See Reply, pp. 28-29. However, Petitioner fails to note the change log of the reference. See Ex. 2003, 103-107. Patent Owner is relying on section 6.6 of TS 45.008 (Ex. 2003). Paper 10 (POR), p.56. The “Change History” of Ex. 2003 shows no changes to section 6.6.0 from the previously

released version of the specification. See Ex. 2003, p. 103. Further, no evidence has been presented to refute the specification is a published document. The Declaration of Craig Bishop (2004) establishes that the document was publicly available.

Petitioner also discusses the geofencing of Felt, as opposed to Adharapurapu's cellular provider technique. See Reply, p. 30. Adharapurapu's approach is based on cellular base stations as admitted by Petitioner's Expert. See Ex. 1009 (discussing cellular base stations), see Ex. 1009, ¶ 9-11. What needs to be highlighted regarding Petitioner's second expert report (Ex. 1009) is that Geofencing, as described in the Felt publication, is independent of cellular base stations and can work independently of a cellular provider. Felt explicitly discusses how a wireless client 112 uses a wireless connection, thus independent of a provider's cellular network. However, Adharapurapu's approach, as explained by the Petitioner's Expert, depends on the provider's cellular base stations for determining what base station a device is in. Ex. 1009, p.9. If the cellular provider does not implement the teachings of Adharapurapu, or a cellular device roams onto a network that has not implemented the teachings of Adharapurapu, delivery of content to a user fails. The combination of geofencing in Felt with cellular base stations in Adharapurapu makes little sense as their operations are so different. Petitioner's expert recognizes these differences but fails to explain how they would permit combination of the references. See also

Paper 12 (Reply), p.31. Therefore, “station variation” in a cellular network of Adharapurapu would not be considered analogous to a network-agnostic approach of Felt and Geer.

CONCLUSION

As described in Patent Owner's POR and here, Petitioner has failed to demonstrate the obviousness of the claims of the '108 Patent because none of the references, either alone or in combination, teach all of the elements of the claims. Petitioner's challenges should be denied, and the patentability of the claim should be confirmed.

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Respectfully submitted,

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CERTIFICATE OF SERVICE

Pursuant to 37 C.F.R. § 42.6(e), the undersigned certifies the service of Patent Owner BoardActive Corporation served Patent Owner's Sur-Reply on the counsel of record for Petitioner Foursquare Labs, Inc. by filing this document through the P-TACTS, as well as delivering a copy via electronic mail to the following:

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Date: June 27, 2024

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CERTIFICATE OF COMPLIANCE

This Sur-Reply complies with the type-volume limitations as mandated in 37 C.F.R. § 42.24, totaling 2,798 words. Counsel has relied upon the word count feature provided in Microsoft® Word for Mac Version 16.86.

Dated: June 27, 2024

By: /s/ Meredith Martin Addy
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