

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

APPLE INC.,

Petitioner,

v.

AVANT LOCATION TECHNOLOGIES LLC,

Patent Owner.

Patent No. 9,622,032

Filing Date: June 12, 2015

Issue Date: April 11, 2017

Inventor: Carlos A. Perez Lafuente

Title: METHOD AND SYSTEM FOR MONITORING A MOBILE STATION
PRESENCE IN A SPECIAL AREA

PATENT OWNER'S PRELIMINARY RESPONSE

Case No. IPR2025-01258

TABLE OF CONTENTS

	<u>Page(s)</u>
I. INTRODUCTION	1
II. CLAIM CONSTRUCTION	3
III. LEVEL OF ORDINARY SKILL IN THE ART	5
IV. PETITIONER HAS NOT DEMONSTRATED A REASONABLE LIKELIHOOD OF SUCCESS FOR THE GROUNDS ADVANCED IN THE PETITION, AND THE PETITION SHOULD BE DENIED	5
A. The Petition Does Not Show That Putkiranta, Granberg, and Kraufvelin Discloses “ <i>one or more servers of a provider of presence related services receiving from the mobile station via a mobile telephone network an updating signal that identifies the mobile station’s presence in the special area, the provider of presence related services being different than the mobile telephone network,</i> ” as Required by Claim Element [1.1], and “ <i>sending from the mobile station to at least one server of a provider of presence related services an updating signal via a mobile telephone network that identifies the mobile station’s presence in the special area, the updating signal being indicative of the mobile station’s presence in the special area, the provider of presence related services being different than the mobile telephone network,</i> ” as Required by Claim Element [3.1]	8
B. The Petition Does Not Show That Any Combination of Nam and Noldus Discloses “ <i>one or more servers of a provider of presence related services receiving from the mobile station via a mobile telephone network an updating signal that identifies the mobile station’s presence in the special area, the provider of presence related services being different than the mobile telephone network,</i> ” as Required by Claim Element [1.1], and “ <i>sending from the mobile station to at least one server of a provider of presence related services an updating signal via a mobile telephone network that identifies the mobile station’s presence in the special area, the updating signal being indicative of the mobile station’s presence in the special area,</i>	

*the provider of presence related services being different than
the mobile telephone network,” as Required by Claim Element
[3.1]10*

C. Claims 2 and 4-6 Are Not Obvious Over Any Combination of
Putkiranta, Granberg, Kraufvelin, Vimpari, and Duan, or Nam,
Noldus, and Duan11

V. CONCLUSION.....11

TABLE OF AUTHORITIES

	Page(s)
Cases	
<i>Apple, Inc. v. Contentguard Holdings, Inc.</i> , IPR2015-00355, Paper 9 at 9-10 (P.T.A.B. June 26, 2015).....	6
<i>Avant Location Techs. LLC v. Apple Inc.</i> , Case No. 2:24-cv-00757-JRG (E.D. Tex.)	3, 4, 5, 10
<i>Broadcom Corp. v. Emulex Corp.</i> , 732 F.3d 1325 (Fed. Cir. 2013)	7
<i>Graham v. John Deere Co. of Kansas City</i> , 383 U.S. 1 (1966).....	5
<i>Innogenetics, N.V. v. Abbott Lab 'ys</i> , 512 F.3d 1363 (Fed. Cir. 2008)	7
<i>Intelligent Bio-Sys., Inc. v. Illumina Cambridge Ltd.</i> , 821 F.3d 1359 (Fed. Cir. 2016)	6
<i>KSR Int'l Co. v. Teleflex Inc.</i> , 550 U.S. 398 (2007).....	6
<i>Los Angeles Biomedical Rsch. Inst. at Harbor-UCLA Med. Ctr. v. Eli Lilly & Co.</i> , 849 F.3d 1049 (Fed. Cir. 2017)	7
<i>Pers. Web Techs., LLC v. Apple, Inc.</i> , 848 F.3d 987 (Fed. Cir. 2017)	6
<i>Stratoflex, Inc. v. Aeroquip Corp.</i> , 713 F.2d 1530 (Fed. Cir. 1983)	6
<i>In re Van Os</i> , 844 F.3d 1359 (Fed. Cir. 2017)	7
Other Authorities	
37 C.F.R. § 42.51(b)	5
37 C.F.R. § 42.104(3)	4

LIST OF EXHIBITS

Exhibit No.	Description of Document
2001	Third Amended Docket Control Order (Dkt. 27), <i>Avant Location Techs. LLC v. Ecobee Techs. ULC d/b/a ecobee</i> , Case No. 2:23-cv-00354-JRG-RSP (E.D. Tex. October 17, 2025)
2002	Complaint (Dkt. 1), <i>Avant Location Techs. LLC v. Apple., Inc.</i> , Case No. 2:24-cv-0757-JRG (E.D. Tex. Sept. 13, 2024)
2003	Complaint (Dkt. 1), <i>Avant Location Techs. LLC v. Apple., Inc.</i> , Case No. 7-25-cv-00445-ADA (W.D. Tex. Oct. 1, 2025)
2004	<i>Ecobee Techs. ULC's Invalidity</i> and Subject Matter Eligibility Contentions in <i>Avant Location Techs. LLC v. Ecobee Techs. ULC d/b/a ecobee</i> , Case No. 2:23-cv-00354-JRG-RSP (E.D. Tex.), dated March 14, 2025
2005	Apple Inc.'s First Amended Invalidity and Patent-Eligibility Contentions in <i>Avant Location Techs. LLC v. Apple., Inc.</i> , Case No. 2:24-cv-0757-JRG (E.D. Tex.), dated July 14, 2025
2006	Email Correspondence between Julian Pymeto (Counsel for Patent Owner in the EDTX Apple Litigation / WDTX Apple Litigation) and Andrew Danford (Counsel for Petitioner in the EDTX Apple Litigation / WDTX Apple Litigation)
2007	First Amended Complaint (Dkt. 1), <i>Avant Location Techs. LLC v. Apple., Inc.</i> , Case No. 7-25-cv-00445-ADA (W.D. Tex. Nov. 14, 2025)
2008	Joint Claim Construction Chart Under 4-5(d), Dkt. 30, <i>Avant Location Techs. LLC v. Ecobee Techs. ULC d/b/a ecobee</i> , Case No. 2:23-cv-00354-JRG-RSP (E.D. Tex.), filed October 31, 2025

I. INTRODUCTION

On September 11, 2025, Apple Inc. (“Petitioner” or “Apple”) submitted a Petition (Paper 2, “Petition” or “Pet.”) to institute *inter partes* review (“IPR”) of U.S. Patent No. 9,622,032 (Ex. 1001, the “’032 Patent”), challenging Claims 1-6 (the “Challenged Claims”). The Petition asserts that (i) Claims 1-3 are rendered obvious over U.S. Patent No. 8,615,256 (Ex. 1005, “Putkiranta”), U.S. Patent No. 6,122,510 (Ex. 1037, “Granberg”), and U.S. Patent Application Publication No. US 2006/0135174 (Ex. 1006, “Kraufvelin”); (ii) Claims 4 and 6 are rendered obvious over Putkiranta, Granberg, Kraufvelin, and Canadian Pub. CA 2 523 595 (Ex. 1015, “Duan”); (iii) Claim 5 is rendered obvious over Putkiranta in view of Granberg, Kraufvelin, and International Pub. WO 2000/27152 (Ex. 1010, “Vimpari”); (iv) Claims 1-3 and 5 are obvious over U.S. Patent Application Publication No. US 2006/0014531 (Ex. 1013, “Nam”) and U.S. Patent Application Publication No. US 2010/0167725 (Ex. 1038, “Noldus”); and (v) Claims 4 and 6 are rendered obvious over Nam, Noldus, and Duan. Pet. at 14. The Board should deny the Petition for at least the reasons described briefly below.

Petitioner fails to show that the combinations of Putkiranta, Granberg, and Kraufvelin, or Nam and Noldus disclose at least “one or more servers of a provider of presence related services receiving from the mobile station via a mobile telephone network an updating signal that identifies the mobile station’s presence in the special

area, the provider of presence related services being different than the mobile telephone network,” as Required by Claim Element [1.1], and “sending from the mobile station to at least one server of a provider of presence related services an updating signal via a mobile telephone network that identifies the mobile station’s presence in the special area, the updating signal being indicative of the mobile station’s presence in the special area, the provider of presence related services being different than the mobile telephone network,” as Required by Claim Element [3.1].

First, the Petition is deficient because Petitioner relies on Putkiranta’s mobile station sending a “message 203” to Putkiranta’s *service server* to disclose the claimed mobile station transmitting an updating signal to at least one server of a provider of presence related services. However, Putkiranta explicitly describes that the actual service is provided by the application server. Therefore, in Putkiranta, the updating signal is not transmitted to the provider of presence related services.

Second, the Petition is deficient because Petitioner relies on Nam’s mobile station sending a trigger event to Nam’s *LP server* to disclose the claimed mobile station transmitting an updating signal to at least one server of a provider of presence related services but the LP server is *not* a provider of presence related services under its proper construction of “services provided *to a mobile station* depending on its presence in a special area.” Nam merely describes providing an LBS application rather than the mobile station with a presence related service. Therefore, the Petition

is deficient for failing to disclose “services provided to a mobile station.”

Accordingly, the Board should deny institution of the Petition

II. CLAIM CONSTRUCTION

Petitioner’s assertion that “[c]laim terms in IPRs are construed according to their ‘ordinary and customary meaning’ to those of skill in the art” (Pet. at 13) contradicts its positions in *Avant Location Techs. LLC v. Apple Inc.*, Case No. 2:24-cv-00757-JRG (E.D. Tex.) (the “District Court Litigation”). In the District Court Litigation, Petitioner agreed to the following constructions, which Patent Owner ultimately also agreed to:

Claim Term	Claims	Proposed Construction
“checking data”	’032 Patent, Claims 1 and 3	“data that the mobile station compares against information from a received signal to determine whether the received signal is a distinctive defining signal.”
“special area”	’032 Patent, Claims 1 and 3	“area within the coverage of at least one distinctive defining signal”
“radio communication defining device” / “radio communication defining devices”	’032 Patent, Claims 1 and 3	“device capable of at least wirelessly transmitting radio distinctive defining signals that by their coverage define a special area”
“mobile station”	’032 Patent, Claims 1-6	a mobile device such as a mobile phone or PDA
“presence related service[s]”	’032 Patent, Claims 1, 3, and 6	“services provided to a mobile station depending on its presence in a special area”

Ex. 2008.¹ The Petition does not assume that the plain and ordinary meaning of these terms is as limited as the parties' agreed-upon constructions, and the Petition's analysis of the claim limitations containing these terms against the cited references does not indicate that those references disclose the claim terms under Petitioner's agreed constructions in the District Court Litigation.

If Petitioner believed that any claim terms required construction, it had a duty to identify “[h]ow the challenged claim is to be construed” in its Petition. 37 C.F.R. § 42.104(3); *see also* Patent Trial and Appeal Board Consolidated Trial Practice Guide, November 2019, at 48 (“The Board, in its claim construction determinations, will consider statements regarding claim construction made by patent owners and by a petitioner filed in other proceedings, if the statements are timely made of record.”) (citations omitted). Instead, Petitioner chose to apply the plain and ordinary meaning in this proceeding while agreeing to narrower constructions in the District Court Litigation. Therefore, the parties' agreed-upon constructions in the District Court Litigation should be applied in this proceeding.

¹ While filed after Apple Inc. was deconsolidated from the case, the positions therein were jointly held by Defendants Apple Inc. and Ecobee Technologies ULC d/b/a ecobee.

For the purposes of this Preliminary Response, Patent Owner notes that since both Patent Owner and Petitioner agreed to the constructions of the above terms in the District Court Litigation, it is highly likely that the District Court will enter the agreed constructions. Patent Trial and Appeal Board Consolidated Trial Practice Guide, at 47 (citations omitted) (“Parties should submit a prior claim construction determination by a federal court or the ITC in an AIA proceeding as soon as that determination becomes available. Preferably, the prior claim construction determination should be submitted with the petition, preliminary response, or response, along with explanations. Submission of a prior claim construction determination is mandatory under 37 C.F.R. § 42.51(b), if it is ‘relevant information that is inconsistent with a position advanced by the party during the proceeding.’”).

III. LEVEL OF ORDINARY SKILL IN THE ART

For the purposes of this Preliminary Response only, Patent Owner applies Petitioner’s definition of a POSITA. Pet. at 12-13.

IV. PETITIONER HAS NOT DEMONSTRATED A REASONABLE LIKELIHOOD OF SUCCESS FOR THE GROUNDS ADVANCED IN THE PETITION, AND THE PETITION SHOULD BE DENIED

The question of obviousness is resolved on the basis of underlying factual determinations, including: (1) the scope and content of the prior art, (2) any differences between the claimed subject matter and the prior art, (3) the level of skill in the art, and (4) so-called secondary considerations where in evidence. *Graham v.*

John Deere Co. of Kansas City, 383 U.S. 1, 17-18 (1966); *KSR Int'l Co. v. Teleflex Inc.*, 550 U.S. 398, 406 (2007). The question is not whether the differences themselves would have been obvious, but whether the claimed invention as a whole would have been obvious. *Stratoflex, Inc. v. Aeroquip Corp.*, 713 F.2d 1530, 1537 (Fed. Cir. 1983).

The Board has held that a failure to identify the differences between the claimed subject matter and the prior art is fatal to an obviousness challenge. *See, Apple, Inc. v. Contentguard Holdings, Inc.*, IPR2015-00355, Decision Denying Institution of *Inter Partes* Review, Paper 9 at 9-10 (P.T.A.B. June 26, 2015) (denying institution for failure to identify the differences between the claimed subject matter and the prior art).

In arriving at an obviousness determination, the Board must sufficiently explain and support the conclusions that the prior art references disclose all the elements recited in the Challenged Claims and a relevant, skilled artisan not only could have made, but would have been motivated to combine all the prior art references in the way the patent claims and reasonably expected success. *Pers. Web Techs., LLC v. Apple, Inc.*, 848 F.3d 987, 994 (Fed. Cir. 2017). That is, even if all the claim elements are found across a number of references, an obviousness determination must consider whether a person of ordinary skill in the art would have the motivation to combine those references. *Intelligent Bio-Sys., Inc. v. Illumina*

Cambridge Ltd., 821 F.3d 1359, 1368 (Fed. Cir. 2016); *Los Angeles Biomedical Resch. Inst. at Harbor-UCLA Med. Ctr. v. Eli Lilly & Co.*, 849 F.3d 1049, 1067 (Fed. Cir. 2017) (vacating and remanding an obviousness determination, in part, because the Board did not make factual finding as to whether there was an apparent reason to combine all three prior art references to achieve the claimed invention and whether a person of skill in the art would have had a reasonable expectation of success from such a combination). This combinability determination, as supported by an articulated motivation to combine, requires a plausible rationale as to why those prior art references would have worked together. *Broadcom Corp. v. Emulex Corp.*, 732 F.3d 1325, 1335 (Fed. Cir. 2013). Absent some articulated rationale, a “common sense” finding is no different than the conclusory statement “would have been obvious.” *In re Van Os*, 844 F.3d 1359, 1361 (Fed. Cir. 2017). Of additional importance, “knowledge of a problem and motivation to solve it are entirely different from motivation to combine particular references” *Innogenetics, N.V. v. Abbott Lab’ys*, 512 F.3d 1363, 1373 (Fed. Cir. 2008).

- A. **The Petition Does Not Show That Putkiranta, Granberg, and Kraufvelin Discloses “*one or more servers of a provider of presence related services receiving from the mobile station via a mobile telephone network an updating signal that identifies the mobile station’s presence in the special area, the provider of presence related services being different than the mobile telephone network,*” as Required by Claim Element [1.1], and “*sending from the mobile station to at least one server of a provider of presence related services an updating signal via a mobile telephone network that identifies the mobile station’s presence in the special area, the updating signal being indicative of the mobile station’s presence in the special area, the provider of presence related services being different than the mobile telephone network,*” as Required by Claim Element [3.1]**

Claims 1 and 3 of the ’032 Patent require at least one “server[s] of a provider of presence related services” receiving an updating signal from the mobile station “that identifies the mobile station’s presence in the special area.” Petitioner only relies on Putkiranta to disclose this claim limitation. Pet. at 29-33.

The Petition is deficient because Petitioner relies on Putkiranta’s mobile station sending a “message 203” to Putkiranta’s *service server* to disclose the claimed mobile station transmitting an updating signal to at least one server of a provider of presence related services. Pet. at 30-31. However, Putkiranta explicitly describes that the service server is *not* a provider of presence related services. Putkiranta describes that “[t]he role of the service server in the embodiment according to FIG. 2 is to maintain information about which mobile stations are in which localized service areas and which services should be offered to them

accordingly. *The actual service is provided by the application server.*” Ex. 1005, 6:22-26 (emphasis added). Elsewhere, Putkiranta also describes that the service server only provides a service selection. *Id.*, 2:22-28 (“It is characterized in that it comprises a service server which is arranged to maintain information concerning the location of mobile stations in localized service areas and to generate requests for changing the service selection offered to mobile stations in response to receiving, from the mobile stations, mobile station generated messages describing the location of the mobile stations in relation to localized service areas.”). Therefore, the Petition is deficient because it fails to show any disclosure where the mobile station transmits the updating signal to Putkiranta’s application server, which is the actual provider of services.

Because of this deficiency, institution should be denied.

- B. The Petition Does Not Show That Any Combination of Nam and Noldus Discloses “one or more servers of a provider of presence related services receiving from the mobile station via a mobile telephone network an updating signal that identifies the mobile station’s presence in the special area, the provider of presence related services being different than the mobile telephone network,” as Required by Claim Element [1.1], and “sending from the mobile station to at least one server of a provider of presence related services an updating signal via a mobile telephone network that identifies the mobile station’s presence in the special area, the updating signal being indicative of the mobile station’s presence in the special area, the provider of presence related services being different than the mobile telephone network,” as Required by Claim Element [3.1]**

Claims 1 and 3 of the ’032 Patent require at least one “server[s] of a provider of presence related services” receiving an updating signal from the mobile station “that identifies the mobile station’s presence in the special area.” Petitioner only relies on Nam to disclose this claim limitation. Pet. at 66-70.

The Petition is deficient because Petitioner relies on Nam’s mobile station sending a trigger event to Nam’s *LP server* to disclose the claimed mobile station transmitting an updating signal to at least one server of a provider of presence related services. Pet. at 67. However, the LP server is *not* a provider of presence related services. As Petitioner agreed during the District Court Litigation, and as described above in Section II, “presence related services” should be construed as “services provided *to a mobile station* depending on its presence in a special area.” Nam describes that “[t]he location trigger method further comprises *providing an LBS*

application (LBSA) with a location-based service in accordance with the location trigger processed by the LP. Ex. 1013, [0044] (emphasis added). In other words, it is the LBSA rather than the mobile station that is provided the service. Therefore, the Petition is deficient because it fails to show any disclosure where the mobile station transmits the updating signal to a provider of presence related services, as properly construed.

Because of these deficiencies, institution should be denied.

C. Claims 2 and 4-6 Are Not Obvious Over Any Combination of Putkiranta, Granberg, Kraufvelin, Vimpari, and Duan, or Nam, Noldus, and Duan

Claims 2 and 5 are dependent upon Claim 1 and Claims 4 and 6 are dependent upon Claim 3. Therefore, for at least the same reasons as described for Claims 1 and 3, the Petition fails to show how Claims 2 and 4-6 are rendered obvious over any combination of Putkiranta, Granberg, Kraufvelin, Vimpari, and Duan, or Nam, Noldus, and Duan.

V. CONCLUSION

For the foregoing reasons, Patent Owner respectfully requests that the Board deny institution of the Petition in its entirety.

Respectfully submitted,

Dated: December 17, 2025

By: /Peter Lambrianakos /
Peter Lambrianakos (Reg. No. 58,279)
Email: plambrianakos@fabricantllp.com
Lead Counsel for Patent Owner

Vincent J. Rubino, III (Reg. No. 68,594)
Email: vrubino@fabricantllp.com
Back-Up Counsel for Patent Owner
Joseph M. Mercadante (Reg. No. 64,077)
Email: jmercadante@fabricantllp.com
Back-Up Counsel for Patent Owner
FABRICANT LLP
411 Theodore Fremd Avenue
Suite 206 South
Rye, New York 10580
Tel. 212-257-5797
Fax. 212-257-5796

CERTIFICATE OF WORD COUNT

The undersigned hereby certifies that the portions of the above-captioned PATENT OWNER'S PRELIMINARY RESPONSE specified in 37 C.F.R. § 42.24 has 2,437 words in compliance with the 14,000 word limit set forth in 37 C.F.R. § 42.24. This word count was prepared using Microsoft Word for Office 365.

Respectfully submitted,

December 17, 2025

By: /Peter Lambrianakos /
Peter Lambrianakos (Reg. No. 58,279)
Lead Counsel for Patent Owner
FABRICANT LLP
411 Theodore Fremd Avenue
Suite 206 South
Rye, New York 10580
Tel. 212-257-5797
Fax. 212-257-5796
Email: plambrianakos@fabricantllp.com

CERTIFICATE OF SERVICE

A copy of the foregoing Patent Owner's Preliminary Response and Ex. 2008
have been served on Petitioner's counsel of record as follows:

Scott T. Jarratt
Email: scott.jarratt.ipr@haynesboone.com
Adam C. Fowles
Email: adam.fowles@haynesboone.com
Jonathan R. Bowser
Email: jon.bowser.ipr@haynesboone.com
Dan Smith
Email: dan.smith.ipr@haynesboone.com
Brooke E. Parker
Email: brooke.parker.ipr@haynesboone.com
HAYNES AND BOONE, LLP
2801 N. Harwood Avenue, Suite 2300
Dallas, Texas 75201

Attorneys for Apple Inc.

December 17, 2025

By: /Peter Lambrianakos /
Peter Lambrianakos (Reg. No. 58,279)
Lead Counsel for Patent Owner