

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

ROCKET MEDIA, LLC d/b/a LAUNCH LABS,
Petitioner,

v.

FULLTHROTTLE TECHNOLOGIES, LLC,
Patent Owner.

IPR2025-00148
Patent 11,556,947 B2

Before KEVIN W. CHERRY, ARTHUR M. PESLAK, and
SEAN P. O'HANLON, *Administrative Patent Judges*.

CHERRY, *Administrative Patent Judge*.

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

I. INTRODUCTION

Rocket Media, LLC d/b/a Launch Labs (“Petitioner”) filed a Petition to institute *inter partes* review of claims 1–20 of U.S. Patent No. 11,556,947 B2 (Ex. 1001, “the ’947 patent”). Paper 2 (“Pet.”). Fullthrottle Technologies, LLC (“Patent Owner”) filed a Preliminary Response. Paper 6 (“Prelim. Resp.”).

We have authority under 35 U.S.C. § 314 to determine whether to institute an *inter partes* review. The standard for instituting an *inter partes* review is set forth in 35 U.S.C. § 314(a), which provides that an *inter partes* review may not be instituted unless “there is a reasonable likelihood that the petitioner would prevail with respect to at least 1 of the claims challenged in the petition.” The Supreme Court has held that the Board, in a decision to institute under 35 U.S.C. § 314(b), may not institute review on less than all claims challenged in the petition. *SAS Inst. Inc. v. Iancu*, 138 S. Ct. 1348, 1355–56 (2018). Moreover, in accordance with our rules, “[w]hen instituting *inter partes* review, the Board will authorize the review to proceed on all of the challenged claims and on all grounds of unpatentability asserted for each claim.” 37 C.F.R. § 42.108(a) (2020); *see also PGS Geophysical AS v. Iancu*, 891 F.3d 1354, 1360 (Fed. Cir. 2018) (interpreting the statute to require “a simple yes-or-no institution choice respecting a petition, embracing all challenges included in the petition”).

Applying those standards, and upon 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 ’947 patent. Accordingly, we institute an *inter partes* review

of all challenged claims (i.e., 1–20) of the ’947 patent, based on the grounds asserted in the Petition.

II. BACKGROUND

A. *Related Matters*

The parties identify the following proceeding as a related matter involving the ’947 patent: *Fullthrottle Technologies, LLC v. Rocket Media, LLC (d/b/a Launch Labs)*, No. 1:24-cv-00314 (M.D.N.C.). Pet. 62; Paper 4, 2.¹

B. *Real Parties-in-Interest*

Petitioner identifies itself, Rocket Media, LLC d/b/a Launch Labs, as the real party-in-interest. Pet. 62. Patent Owner identifies itself, Fullthrottle Technologies, LLC, as well as Stream Companies Holdings, LLC, Cavalier Enterprise Holdings Inc., Hawk Enterprises Holdings, Inc., and SCP IV AIV V, LP, as real parties-in-interest. Paper 4, 2.

C. *The ’947 Patent*

The ’947 patent is titled “Location Determination Using Anonymous Browser Data” and relates to product marketing using websites. Ex. 1001, code (54), 1:14. The ’947 patent discloses systems and methods for determining a user’s location based on anonymous data associated with the user’s browser session on a computing device. *Id.* at 1:38–42.

Figure 16 of the ’947 patent is shown below.

¹ We note that Paper 4 lacks page numbers. We cite to pages of Paper 4 as if numbered consecutively, beginning with the cover page as page 1.

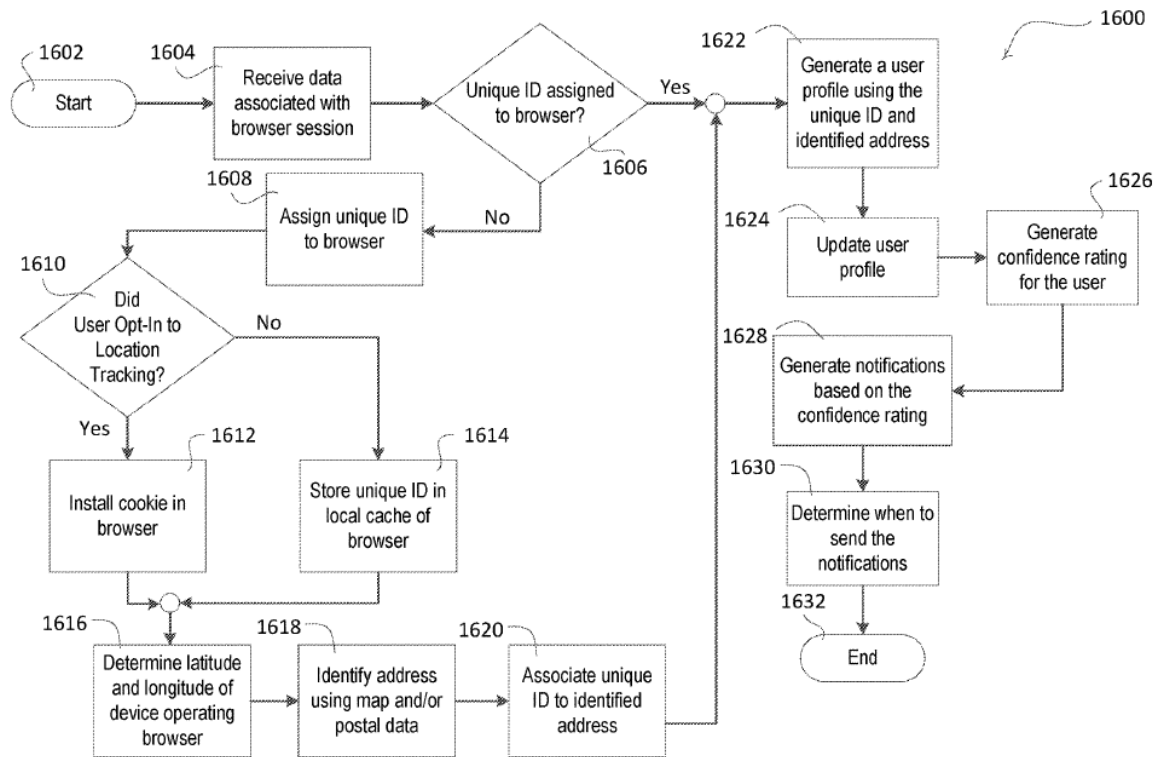


FIG. 16

Figure 16, above, is a flow chart illustrating a computer-implemented method for associating a unique identifier with a user's physical address based on anonymous data. *Id.* at 3:43–46, 42:29–34. The method begins, at step 1602, with a user accessing a uniform resource locator (URL) via a browser application on a user computing device. *Id.* at 43:9–11. At step 1604, a computing device (i.e., server) associated with the URL receives anonymous data from the user's browser session, such as date, time, URL, browser type, language, internet protocol (IP) address, or location data. *Id.* at 43:15–21. After receiving the anonymous data, the server accesses a database and determines if there is a unique identifier associated with the user, at step 1606. *Id.* at 43:49–59. If it is determined that no unique identifier is associated with the user, the server generates a unique identifier and assigns it to the user, at step 1608. *Id.* at 44:5–8.

At step 1610, the server determines whether the user has opted-in to or opted-out of location tracking. *Id.* at 44:17–18. If the user opted-in to location tracking, a tracker cookie is stored in the browser application on the user device, which enables the server to retrieve geo-location data from the user device. *Id.* at 44:25–29. If the user opted-out of location tracking, the server stores the unique identifier assigned to the user in the user’s local browser cache, which can be used to recognize return visits to the URL by the user device. *Id.* at 44:59–67. At step 1616, the server determines latitude and longitude coordinates of the user device using data received from a user’s browser session. *Id.* at 45:21–25. The server uses a map application programming interface (API) to translate the coordinates of the user device into a physical address, such as the postal address where the user device accessed the URL. *Id.* at 45:31–41. At step 1620, the server associates the physical address with the unique identifier assigned to the user. *Id.* at 45:62–65. By mapping the unique identifier to the determined location data, user visits to the URL can be tracked without the use of tracker cookies. *Id.* at 45:66–46:4.

Based on the association between the unique identifier and the location data, the server generates a profile for the user, at step 1622. *Id.* at 46:9–11. The profile tracks user activity with information such as URLs accessed, the frequency of URL visits, and demographics. *Id.* at 46:11–18. The user’s profile information is updated based on subsequent browsing sessions, and may be used to generate targeted advertisements. *Id.* at 46:20–23.

D. The Challenged Claims

Petitioner challenges claims 1–20. Pet. 1. Of the challenged claims, claims 1 and 11 are independent. Claim 1, reproduced below with

Petitioner's identifiers for the claim limitations in bold (*see* Pet. 19–42), is illustrative of the claimed subject matter.

1. [pre] A method comprising:

- [a]** receiving first anonymous data associated with a first browser session initialized by a user via a browser on a user computing device, wherein the first anonymous data comprises one or more of a time, a date, one or more uniform resource locators (URLs), a referring URL, a browser type, a language, an internet protocol (IP) address, or location data;
- [b]** determining that the user accessed a URL during the first browser session;
- [c]** determining that the user has not been assigned a unique identifier based on a lack of stored location data for the user computing device;
- [d]** assigning the unique identifier to the user;
- [e]** determining whether the user opted-in to or out of location tracking, based on whether a location tracker is installed on the user computing device;
- [f]** sending, upon determining that the user opted-out of location tracking, the unique identifier to the user computing device for storage in a local browser cache;
- [g]** determining a latitude coordinate and a longitude coordinate of the user computing device, during the first browser session, wherein the latitude coordinate and the longitude coordinate are determined based on the first anonymous data upon determining that the user opted-out of location tracking, and wherein the latitude coordinate and the longitude coordinate are determined based on geo-location data retrieved from the user computing device upon determining that the user opted-in to location tracking;
- [h]** identifying a physical address for the user based on the determined latitude coordinate and the determined longitude coordinate using a map application programming interface (API);

- [i] associating the unique identifier to the physical address;
- [j] generating a user profile for the user using the unique identifier and physical address, the user profile comprising profile information that comprises one or more URLs the user has accessed, a frequency with which the user accessed the URL(s), demographics associated with the user, the physical address(es) associated with the user, or devices associated with the user;
- [k] updating the profile information based on second anonymous data associated with a second browser session initialized on the user computing device or another user computing device associated with the physical address;
- [l] identifying a second visit to the URL during the second browser session using the unique identifier stored in the local browser cache;
- [m] determining, using the updated profile information, a confidence rating for the user, the confidence rating indicating a quantifiable measure of the user's interest in a product;
- [n] generating one or more notifications based on one or more of the updated profile information or the confidence rating; and
- [o] determining when to send the one or more notifications to the user.

Ex. 1001, 47:44–48:36.

E. Evidence

Petitioner submits the following evidence:

Evidence	Exhibit No.
Declaration of David Hilliard Williams	1007
Doughty et al, U.S. Patent No. 8,898,074 B2 (issued Nov. 25, 2014, filed May 5, 2014) (“Doughty”)	1008
Van Boucq, European Patent Application No. 2 938 045 A1 (published Oct. 28, 2015) (“Van Boucq”)	1009

Evidence	Exhibit No.
Maginnis, U.S. Patent No. 10,311,465 B2 (issued June 4, 2019, filed June 17, 2015) (“Maginnis”)	1010

F. Asserted Grounds

Petitioner asserts the following grounds of unpatentability:

Claim(s) Challenged	35 U.S.C. § ²	Reference(s)/Basis
1–20	103	Doughty, Van Boucq
1–20	103	Doughty, Van Boucq, Maginnis

III. PATENTABILITY ANALYSIS

A patent claim is unpatentable under 35 U.S.C. § 103 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. *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 (4) when in evidence, objective evidence of nonobviousness.³ *Graham v. John Deere Co.*, 383 U.S. 1, 17–18 (1966).

“In an [*inter partes* review], the petitioner has the burden from the onset to show with particularity why the patent it challenges is

² The Leahy-Smith America Invents Act, Pub. L. No. 112-29, 125 Stat. 284 (2011) (“AIA”), amended 35 U.S.C. §§ 102, 103. Because the ’947 patent has an effective filing date after the effective date of the applicable AIA amendment, we refer to the AIA version of § 103.

³ Neither party relies on any objective evidence of obviousness or nonobviousness at this stage of the proceeding.

unpatentable.” *Harmonic Inc. v. Avid Tech., Inc.*, 815 F.3d 1356, 1363 (Fed. Cir. 2016) (citing 35 U.S.C. § 312(a)(3) (requiring *inter partes* review petitions to identify “with particularity . . . the evidence that supports the grounds for the challenge to each claim”)). This burden of persuasion never shifts to Patent Owner. *See Dynamic Drinkware, LLC v. Nat’l Graphics, Inc.*, 800 F.3d 1375, 1378 (Fed. Cir. 2015) (discussing the burden of proof in *inter partes* review).

We organize our patentability analysis into four sections. First, we address the level of ordinary skill in the art. Second, we address claim construction. Third, we provide an overview of the asserted references. And fourth, taking account of the information presented, we consider whether the Petition satisfies the threshold requirement for instituting an *inter partes* review under 35 U.S.C. § 314(a).

A. Level of Ordinary Skill in the Art

We consider the asserted ground of unpatentability in view of the understanding of a person of ordinary skill in the art (“POSITA”). In assessing the level of ordinary skill in the art, various factors may be considered, including the “type of problems encountered in the art; prior art solutions to those problems; rapidity with which innovations are made; sophistication of the technology; and educational level of active workers in the field.” *In re GPAC Inc.*, 57 F.3d 1573, 1579 (Fed. Cir. 1995) (quoting *Custom Accessories, Inc. v. Jeffrey-Allan Indus., Inc.*, 807 F.2d 955, 962 (Fed. Cir. 1986)). “[O]ne or more factors may predominate.” *Id.*

Petitioner contends that a POSITA would have “(1) at least a bachelor’s degree in computer science, computer engineering, electrical engineering, or an equivalent field plus at least one year of experience working on computer networking, or (2) at least 3 years of experience

working on computer networking, even without a formal degree.” Pet. 14 (citing Ex. 1007 ¶¶ 44–47). Patent Owner does not contest Petitioner’s proffered definition. Prelim. Resp. 17.

Petitioner’s proposed definition appears to be consistent with the disclosure of the ’947 patent, and we adopt it for purposes of this Decision. *See Okajima v. Bourdeau*, 261 F.3d 1350, 1355 (Fed. Cir. 2001) (explaining that the prior art itself may “reflect[] an appropriate level” of ordinary skill in the art) (quoting *Litton Indus. Prods., Inc. v. Solid State Sys. Corp.*, 755 F.2d 158, 163 (Fed. Cir. 1985)).

B. Claim Construction

We consider the proper construction of the claims. In interpreting the claims of the ’947 patent, we “us[e] the same claim construction standard that would be used to construe the claim[s] in a civil action under 35 U.S.C. [§] 282(b).” *See* 37 C.F.R. § 42.100(b) (2024). The claim construction standard includes construing claims in accordance with the ordinary and customary meaning of such claims as would have been understood by one of ordinary skill in the art and the prosecution history pertaining to the patent. *See id.*; *Phillips v. AWH Corp.*, 415 F.3d 1303, 1312–14 (Fed. Cir. 2005) (*en banc*).

Petitioner argues that “[a]ll terms of the ’947 patent should be given their plain and ordinary meaning as understood by a POSITA for purposes of this proceeding.” Pet. 14–15. Petitioner notes that Patent Owner advocated for specific constructions of four claim terms in its response to Petitioner’s motion to dismiss in the parallel litigation: (1) “location tracker,” (2) “upon determining that the user opted-out of location tracking,” (3) “unique identifier,” and (4) “determining that the user has not been assigned a unique identifier.” *Id.* at 15 (citing Ex. 1031). Patent Owner

responds that it “adopts Petitioner’s proposed constructions” for its Preliminary Response, and does not contend that any other claim terms require construction. Prelim. Resp. 18.

Having considered the record, we determine that no express claim construction is necessary for any claim terms. *See Realtime Data, LLC v. Iancu*, 912 F.3d 1368, 1375 (Fed. Cir. 2019) (“The Board is required to construe ‘only those terms . . . that are in controversy, and only to the extent necessary to resolve the controversy.’”) (quoting *Vivid Techs., Inc. v. Am. Sci. & Eng’g, Inc.*, 200 F.3d 795, 803 (Fed. Cir. 1999)).

C. Prior Art

Before turning to Petitioner’s asserted grounds of unpatentability, we provide brief summaries of the asserted references.

1. Doughty

Doughty is titled “Creation of a Universal Profile of a User by Identifying Similar User-Managed Assets on a Plurality of Devices of the User.” Ex. 1008, code (54). Doughty “relates to the field of mobile communications and more particularly to improved methods and systems directed to targeting advertising to mobile and non-mobile communication facilities accessed by the same user.” *Id.* at 5:27–30. Doughty discloses, “[i]n a first embodiment, a system for identifying a same user of multiple communication devices.” *Id.* at 6:1–2. Figure 1 of Doughty, reproduced below, shows the first embodiment.

FIG. 1

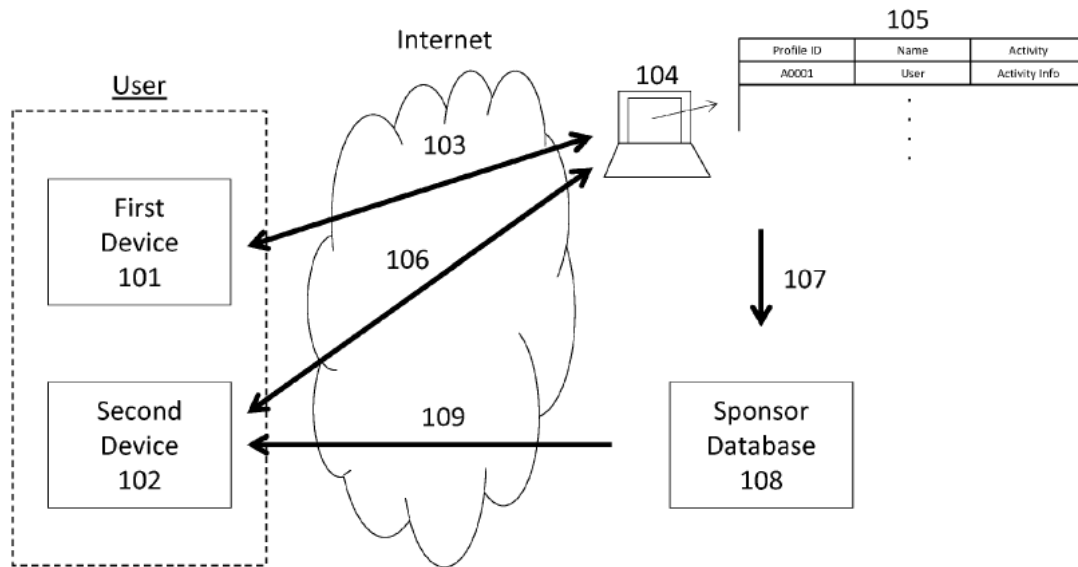


Figure 1 depicts a wireless system for providing advertisements to multiple communication devices for a user, including first device 101, second device 102, server 104, and sponsor database 108. *Id.* at 10:15–18. Server 104 communicates with first device 101 and receives information about the user’s activity on that device, such as a behavioral pattern, viewing habits, usage data, and geographic location. *Id.* at 10:34–39. Once the user’s activity information is received, server 104 assigns a unique identifier to first device 101 and stores the unique identifier, user information, and activity information in table 105. *Id.* at 10:45–50. By linking identifiers, such as serial numbers or other third-party identifiers, server 104 identifies that second device 102 also belongs to the user and records this information in table 105. *Id.* at 11:16–26. Server 104 informs sponsor database 108, and requests that sponsor database 108 transmit an advertisement to second device 102, which may be based on the user’s activity data for first device 101. *Id.* at 10:52–62, 11:26–29.

Doughty also discloses associating the user's unique identifier with a profile. *Id.* at 12:13–14. A single user may have multiple profiles based on web browser activities on different devices. *Id.* at 12:30–32. For example, a user may have a first profile associated with first device 101 and a second profile associated with second device 102. *Id.* at 12:38–40. Server 104 stores the first and second user profiles in table 105, and can link the first and second user profiles together into a single universal profile for the user. *Id.* at 12:53–58. According to Doughty, “collapsing all profiles and activities into a single profile simplifies the unique identifying process.” *Id.* at 12:32–34. Server 104 sends the universal profile information to sponsor database 108, which pushes advertisements to the user's devices based on a relevancy score between an advertisement and a universal profile. *Id.* at 12:58–65.

2. *Van Boucq*

Van Boucq is titled “Geolocation Method.” Ex. 1009, code (54).⁴ *Van Boucq* relates to the delivery of advertisements based on geolocation data. *Id.* ¶ 1. *Van Boucq* explains that a known method for geolocating an internet user relies on the user's internet protocol (IP) address. *Id.* ¶ 5. However, “[a] major drawback to geolocating Internet users solely by the geolocation of their IP addresses is that ads targeted to the point where the Internet users' IP addresses are geolocated are delivered to Internet users who may in fact be a long way from that point.” *Id.* ¶ 10. *Van Boucq* discloses “a geolocation method enabling a precise geolocation to be assigned to an Internet user whose IP address is known but who is not

⁴ Citations to *Van Boucq* herein refer to the English language translation appearing on pages 33–61 of Exhibit 1009.

geolocated by any geolocation method other than geolocation via the user's IP address.” *Id.* ¶ 13.

Figure 2 of Van Boucq is reproduced below.

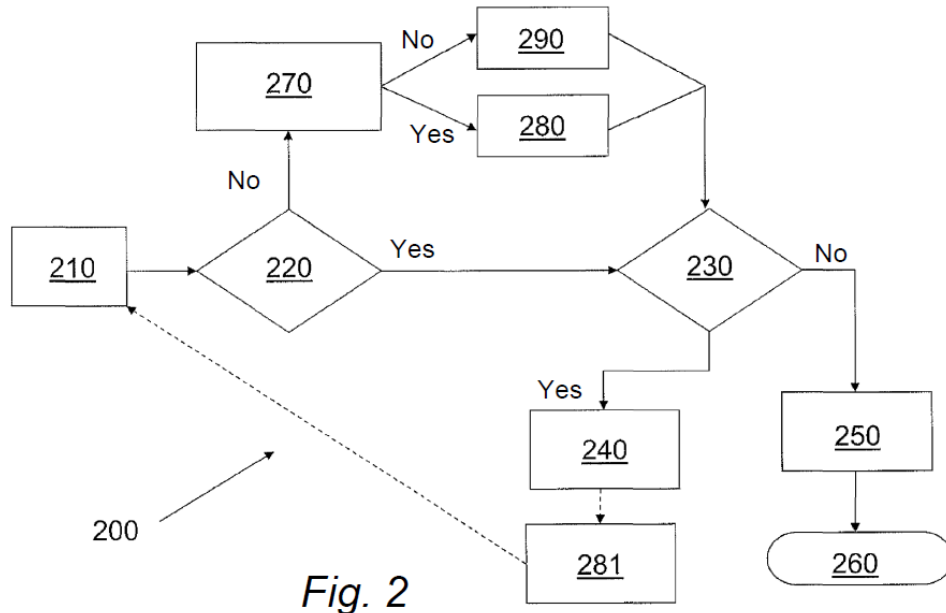


Figure 2 of Van Boucq, above, depicts an operational flow diagram of a communication system according to one embodiment. *Id.* ¶ 59. At step 210, an ad window appears as an internet user accesses a website, and, at step 220,

the HTTP (hypertext transfer protocol) communication protocol ... is verified by the web browser to determine whether the Internet user has already previously geolocated him/herself and already has a cookie (connection cookie), which makes it possible to determine whether the geolocation of said Internet user has already been stored in a browsing device.

Id. ¶ 60. If, at step 220, it is determined that the user has not previously been geolocated, and the user's location is unknown, a pop-up message will ask the user if they would like to be geolocated at step 270. *Id.* ¶ 63. If the user agrees, the user is geolocated via the user's web browser and a location service at step 280. *Id.* ¶ 68. If the user refuses to be geolocated or ignores

the pop-up, the communication system will still geolocate the user based on the user's IP address at step 290. *Id.* ¶ 63. After a user has been geolocated in step 280 or step 290, or if it is determined in step 220 that the user has been previously geolocated, the communication system proceeds to step 230 and searches an ad database to determine if there is a local ad that corresponds to the user's geolocation. *Id.* ¶¶ 60, 64, 69. If a local ad corresponding to the user's geolocation is found in the database, the local ad is displayed to the user. *Id.*

3. *Maginnis*

Maginnis is titled "Estimating Foot Traffic Lift in Response to an Advertisement Campaign at an Online System." Ex. 1010, code (54). *Maginnis* describes determining the effectiveness of an online advertising campaign using a system that estimates a store's foot traffic based on location data for users in the vicinity of the store. *Id.* at 1:38–44. In particular, the system includes a location module that determines the location of a user by accessing location data from the user's device and storing the data in a user profile. *Id.* at 9:5–10. The location module converts raw location data received from the user's device into a corresponding address via reverse geocoding. *Id.* at 9:19–25.

D. *Alleged Ground of Unpatentability Over Doughty and Van Boucq*

Petitioner contends that claims 1–20 of the '947 patent would have been unpatentable under 35 U.S.C. § 103 as obvious over Doughty and Van Boucq. Pet. 19–53. Patent Owner argues that Doughty and Van Boucq do not disclose or suggest limitations 1[c], 1[e], 1[f], and 1[l], and one of ordinary skill in the art would not have been motivated to combine the references as proposed by Petitioner. Prelim. Resp. 18–34.

1. Motivation to Combine Doughty and Van Boucq

Petitioner argues that a POSITA would have been motivated to combine the teachings of Doughty and Van Boucq. Pet. 19–21. In particular, Petitioner submits that Doughty describes finding the user’s location to help with its targeted advertising method, but does not expressly detail how to determine the user’s location beyond identifying a number of known methods. *Id.* at 19–20. Petitioner argues that a POSITA “thus would have been motivated to look at other references in the same field of targeted advertising on the internet that provide further detail regarding the methods identified by Doughty and how to determine the user’s location, such as Van Boucq.” *Id.* at 20 (citing Ex. 1007 ¶ 130). Petitioner further asserts that a POSITA “would have likewise found it obvious to implement the geolocation methods described in Van Boucq to determine the user’s location as already contemplated by Doughty.” *Id.* (citing Ex. 1008, 26:44–51, 8:35–56; Ex. 1007 ¶¶ 131–132). Petitioner contends that a POSITA would have had a reasonable expectation of success. *Id.* (citing Ex. 1008, 19:40–46). Petitioner also argues that a POSITA would have understood that incorporating Van Boucq’s user location teachings to Doughty would have been applying a known technique to a known system ready for improvement to yield predictable results. *Id.* at 21.

Patent Owner argues that Petitioner fails to show a motivation to combine Doughty and Van Boucq. Prelim. Resp. 34. Patent Owner asserts that “Doughty is focused on identifying different devices and monitoring information, such as patterns or user activity, on the devices for ‘linking’ those devices to a common user, allowing an advertising system to provide similar advertisements to the same user across devices.” *Id.* (citing

Ex. 1008, 6:1–19; 10:7–14). Patent Owner submits that “[t]he invention of Doughty is directed towards monitoring information, such as patterns or user activity, on different devices, because the devices are not otherwise ‘linked’ in the advertising system.” *Id.* (citing Ex. 1008, 10:7–14). Patent Owner contends that, on the other hand, “Van Boucq is directed to geolocating an Internet user via a browsing device to determine *whether the same browsing device has been previously geolocated* for delivering relevant advertisements in the location.” *Id.* (citing Ex. 1009, ¶¶ 4, 60, 63, 67). Thus, Patent Owner concludes that a POSITA “would not have been motivated to combine Doughty and Van Boucq because one invention is directed to linking different devices to the same user based on monitored information at each device, while the other invention is directed to geolocating a single device.” *Id.*

We find that Petitioner has shown a sufficient motivation to combine. Although Patent Owner is correct in its description of the respective inventions of Doughty and Van Boucq, we do not see how the particular differences of the overall systems matter or would dissuade a POSITA from combining the particular teachings that Petitioner identifies. As Petitioner explains, these references are in same field of endeavor—tracking users for internet advertising, and Petitioner does not propose wholesale incorporation of the system of Van Boucq into Doughty—and therefore qualify as prior art to the ’947 patent and can be combined to show obviousness. *See In re Clay*, 966 F.2d 656, 658 (Fed. Cir. 1992). Petitioner proposes using certain teachings from Van Boucq’s system to improve certain aspects of Doughty. Thus, on this record, we find Petitioner has shown an adequate motivation combine and do not find Patent Owner’s arguments diminish that showing.

2. *Claim 1*

a) *1[pre] “A method comprising”*

Petitioner contends Doughty alone or in combination with Van Boucq discloses this limitation. Pet. 19. Petitioner submits that Doughty discloses “improved methods” “directed to targeting advertising to mobile and non-mobile communication facilities accessed by the same user.” *Id.* (citing Ex. 1008, 5:28–30). Petitioner notes that Van Boucq similarly discloses “a geolocation method for delivering advertisements.” *Id.* (citing Ex. 1009 ¶ 1). Thus, Doughty and Van Boucq both disclose methods of delivering targeted advertisements using the user’s location. *Id.* (citing Ex. 1007 ¶ 136).

At this time, Patent Owner does not dispute that the combination discloses the preamble. *See* Prelim. Resp. 18 (arguing that the prior art fails to disclose limitations 1[c], 1[e], 1[f], and 1[l] only). At this stage of the proceeding, based on Petitioner’s arguments and evidence, we find that, to the extent the preamble is limiting, Petitioner has shown sufficiently that the combination discloses the preamble.

b) *1[a]: receiving first anonymous data associated with a first browser session initialized by a user via a browser on a user computing device, wherein the first anonymous data comprises one or more of a time, a date, one or more uniform resource locators (URLs), a referring URL, a browser type, a language, an internet protocol (IP) address, or location data*

Petitioner contends Doughty discloses and/or renders obvious this limitation. Pet. 21–23. Petitioner submits that Doughty discloses “receiv[ing] information relating to the user’s activity.” *Id.* at 22 (citing Ex. 1008, 10:34–40). Petitioner notes that Doughty explains the received

information can include anonymous “information, such as the IP address” and “the type of browser.” *Id.* (citing Ex. 1008, 17:18–19). Petitioner further notes that the system can track information related to specific browser sessions, including

one or more of: (a) a URL of each respective web page; (b) a time of visiting each respective web page [which a POSITA would have understood includes the date]; (c) a duration of visiting each respective web page; (d) an order in which each web page is visited; and (e) a geographic location of the first and second device at the time of visiting each respective web page.

Id. (citing Ex. 1008, 6:19–25; Ex. 1007 ¶¶ 137–138).

Petitioner argues that

Given that Doughty discloses tracking the URL, time of visiting, duration of visiting for each web page, and order of each web page, a POSITA would have understood that Doughty discloses tracking “data associated with a first browsing session initialized by a user via a browser on a user computing device.”

Id. (citing Ex. 1007 ¶¶ 139–143; Ex. 1008, code (54)).

Petitioner alternately contends that

it would have been obvious to a POSITA to track this information about the user based upon the user’s browsing sessions, particularly because, as disclosed above, Doughty already discloses tracking the URL, time of visiting, and duration of visiting for each web page and also tracking information across multiple devices with different browsing sessions.

Id. at 23 (citing Ex. 1007 ¶ 142).

At this time, Patent Owner does not dispute that the combination discloses limitation 1[a]. *See* Prelim Resp. 18. At this stage of the proceeding, based on Petitioner’s arguments and evidence, we find that Petitioner has shown sufficiently that the combination discloses this limitation.

c) 1[b]: determining that the user accessed a URL during the first browser session

Petitioner contends Doughty discloses and/or renders obvious this limitation. Pet. 23–24. Petitioner asserts that Doughty discloses tracking the URL of “each respective web page” visited by a user, including “an order in which each web page is visited.” *Id.* at 23 (citing Ex. 1008, 6:19–25). Petitioner submits that “[b]y tracking respective web pages and the order in which they are visited, a POSITA would have understood that the system is determining that the user accessed a URL during a particular browsing session.” *Id.* at 23–24 (citing Ex. 1007 ¶ 144). Petitioner argues that “[a]lternatively, it would have been obvious to a POSITA to determine that the user accessed a particular URL during a particular browsing session (including different browsing sessions on different devices).” *Id.* at 24 (citing Ex. 1007 ¶ 145).

At this time, Patent Owner does not dispute that the combination discloses limitation 1[b]. *See* Prelim Resp. 18. At this stage of the proceeding, based on Petitioner’s arguments and evidence, we find that Petitioner has shown sufficiently that the combination discloses this limitation.

d) 1[c]: determining that the user has not been assigned a unique identifier based on a lack of stored location data for the user computing device

Petitioner contends that Doughty alone or in combination with Van Boucq discloses this limitation. Pet. 24–27. Petitioner notes that Doughty explains that the system will “determin[e] that a pre-existing universal profile has not been created.” *Id.* at 24 (citing Ex. 1008, 6:25–30). Petitioner contends that it would have been obvious to a POSITA that, “to determine whether the user has been assigned a unique identifier (i.e., has a

profile set up), Doughty’s system checks whether it has previously stored the user’s unique ID by checking for a cookie or other file it previously stored on the user’s device.” *Id.* (citing Ex. 1007 ¶¶ 147–149). Petitioner notes that “Doughty recognizes that the user’s device may include cookies or pixel tags previously served by advertisers that need to be matched to a unique ID.” *Id.* at 24–25 (citing Ex. 1008, 16:51–17:27). Petitioner reasons that “when Doughty’s system determines a profile does not exist, it is ‘based on a lack of stored location data for the user computing device.’” *Id.* at 25.

Petitioner also argues that “[t]o the extent Doughty does not disclose and/or render obvious this limitation, a POSITA would have been motivated to look for methods of determining whether the user has not yet been assigned a unique ID based on a lack of stored location data.” *Id.* Petitioner submits that “Van Boucq explains that the determination of whether or not the user has a profile and unique ID may be done by checking if the Internet user already has a geolocation cookie on the computing device.” *Id.* at 25–26 (citing Ex. 1009 ¶ 60 (“the HTTP (hypertext transfer protocol) communication protocol 220 is verified by the Web browser to determine whether the Internet user has already previously geolocated him/herself and already has a cookie (connection cookie)”)).

Petitioner argues that a

POSITA would have been motivated to, and found it obvious to, check for a similar cookie or file on the user’s computer, as disclosed, in Van Boucq when making that determination in Doughty because a POSITA would have realized this is an efficient and commonly used means to determine whether the user has already been assigned a unique ID.

Id. at 26 (citing Ex. 1007 ¶ 153). Petitioner notes that “Doughty discloses storing a cookie or another file with the unique ID on the user’s computer,

which a POSITA would have recognized could have been used to check whether the user has already been assigned a unique ID.” *Id.* (citing Ex. 1008, 16:59–17:33; Ex. 1007 ¶ 153).

Petitioner asserts that a POSITA

would have understood that incorporating Van Boucq’s geolocation teachings to Doughty (1) would have simply been applying a known technique to a known system ready for improvement to yield predictable results; and (2) would have been one of a finite number of identified predictable solutions for determining whether the user has already been assigned a unique ID that had a reasonable expectation of success.

Id. (citing Ex. 1007 ¶ 153).

Patent Owner argues that Petitioner has failed to show that either Doughty or Doughty in combination with Van Boucq discloses this limitation. *See* Prelim. Resp. 18–23. Patent Owner asserts that Petitioner fails to address the agreed upon construction of “determining that the user has not been assigned a unique identifier,” which “is ‘a “unique identifier” that was not previously assigned when it was previously determined that the user had opted out of location tracking.’” *Id.* at 19 (quoting Pet. 15). Patent Owner argues that Doughty does not disclose anything about taking actions based on “a lack of stored location data.” *Id.* Patent Owner contends that, in fact, Doughty does not disclose this limitation because Doughty “assigns a unique identifier” upon receiving a “user’s activity” not based on the lack of stored location data. *Id.* Patent Owner argues that “Doughty’s goal is not to assign an identifier based on location data, but rather to assign all devices a unique identifier and then correlate them to particular users based on the user activity, not to assign an identifier based on lack of location data.” *Id.* at 21 (citing Ex. 1009, 10:12–14).

With respect to Van Boucq, Patent Owner contends that “Van Boucq only describes determining that the Internet user has already previously geolocated him/herself and already has a cookie (connection cookie), which makes it possible to determine whether the geolocation of said Internet user has already been stored in a browsing device.” *Id.* (citing Ex. 1009, ¶ 60). Patent Owner also argues that “Van Boucq does not satisfy this construction because Van Boucq’s ‘connection cookie’ is a first-party cookie, not a third-party cookie.” *Id.* at 22 (citing Ex. 1009 ¶ 60).

We find that Petitioner has shown sufficiently that the combination of Doughty and Van Boucq accounts for this limitation. Because we find that the Petitioner has shown sufficiently that the combination accounts for this limitation, we find it is unnecessary to decide if Petitioner’s argument that Doughty alone discloses this limitation is sufficiently supported.

In the proposed combination, Doughty would be modified in view of Van Boucq’s teaching of checking whether the user already has been geolocated on the computing device. *See* Pet. 25–26 (citing Ex. 1009 ¶ 60). Patent Owner’s arguments regarding Doughty alone are, therefore, unavailing because they address the references individually and not the combination. *See In re Keller*, 642 F.2d 413, (CCPA 1981).

With regard to Patent Owner’s arguments regarding Van Boucq, they suffer from a number of problems. For example, Petitioner does not rely on Van Boucq for the claimed “unique identifier,” as Patent Owner contends (Prelim. Resp. 21–22, 28–29), but merely for its teaching that the lack of a cookie can be used to identify users who have not previously been

geolocated.⁵ The Petition relies on Doughty’s express statement that its system “assigns a unique identifier.” *See* Pet. 27 (citing Ex. 1008, 10:45–50).

As for Patent Owner’s arguments regarding the nature of Van Boucq’s cookie (Prelim. Resp. 22–23), these arguments are unavailing for several reasons. First, nothing in limitation 1[c] requires a particular type of cookie, so Patent Owner’s arguments do not match the scope of this claim limitation. Second, Petitioner does not propose bodily incorporating Van Boucq’s cookie into Doughty system, but just using Van Boucq’s insights regarding the lack of stored cookie (or other file) to improve Doughty’s system. *See* Pet. 25–26. Thus, Patent Owner’s contentions regarding the nature of Van Boucq’s cookie does not address Petitioner’s actual arguments for this claim limitation.

On this record, we find persuasive Petitioner’s reasoning that a POSITA would be motivated to modify Doughty, based on Doughty’s own teachings regarding cookies and similar files, and would have recognized that the techniques of Van Boucq would have offered an efficient and commonly used way to determine whether the user already has been assigned a unique identifier. *See* Ex. 1007 ¶ 153. Thus, we find that Petitioner has shown sufficiently, at this stage, that the combination of Doughty and Van Boucq accounts for this limitation.

⁵ We also disagree with Patent Owner’s contention that the Petition has not accounted for its construction of “unique identifier.” Prelim. Resp. 19. Petitioner discusses “unique identifier” at length with respect to limitation 1[d]. *See* Pet. 27.

e) 1[d]: assigning the unique identifier to the user

Petitioner contends Doughty discloses this limitation. Pet. 27–28. Petitioner notes that Doughty discloses that the system “assigns a unique identifier” to a user and then stores that unique identifier with the other user information in the profile. *Id.* at 27 (citing Ex. 1008, 10:45–50). Petitioner argues that Doughty explains that the unique identifier may be, for example, created by hashing information about the user. *Id.* (citing Ex. 1008, 10:45–50, 17:28–32; Ex. 1007 ¶ 156). Petitioner asserts that a POSITA “would have understood that assigning a ‘unique identifier to the user’ necessarily means the identifier is ‘unique to the user’ because if [the] identifier was not unique to the user, the system would not be able to identify specific users.” *Id.* (citing Ex. 1007 ¶ 157). Petitioner argues that a POSITA “also would have understood that the assignor of the unique identifier (e.g., website server/system) would know the correlation to the user because, without tracking that correlation between the identifier and the user, the system would not be able to identify the user later.” *Id.* at 27–28 (citing Ex. 1007 ¶ 157).

At this time, Patent Owner does not dispute that the combination discloses limitation 1[d]. *See* Prelim Resp. 18. At this stage of the proceeding, based on Petitioner’s arguments and evidence, we find that Petitioner has shown sufficiently that the combination discloses this limitation.

f) 1[e]: determining whether the user opted-in to or out of location tracking, based on whether a location tracker is installed on the user computing device

Petitioner contends Doughty alone or in combination with Van Boucq renders obvious this limitation. Pet. 28–31. With respect to Doughty alone,

Petitioner argues that Doughty renders obvious determining whether the user opted-in to or out of location tracking in the system in Doughty. *Id.* at 28–29. Petitioner notes that Doughty discloses determining and tracking the user’s geographic location as part of the user’s profile. *Id.* at 28 (citing Ex. 1008, 6:19–25, 15:49–16:27). Petitioner also notes that Doughty recognizes that users may turn off browser cookies. *Id.* (citing Ex. 1008, 17:24–27; Ex. 1007 ¶ 159). Thus, Petitioner contends that a POSITA would have understood that Doughty contemplates location tracking without cookies, including third-party cookies. *Id.* (citing Ex. 1007 ¶¶ 159–161). Petitioner submits that “because location tracking is important to the profile consolidation system described in Doughty, a POSITA would have understood the importance of determining the user’s location even if the user opted-out of sharing location data.” *Id.* at 28–29 (citing Ex. 1008, 15:18–48, 17:57–59, 20:52–64). Petitioner argues that a POSITA “therefore would have been motivated to find an alternative means of locating the user in Doughty’s system, even when the user has opted-out of location sharing.” *Id.* at 29 (citing Ex. 1007 ¶ 161).

Petitioner also contends that a POSITA “would have been motivated to look for references in the same field of art that describe how to determine whether a user opted-in or out of location tracking.” *Id.* Petitioner submits that a POSITA “would have been motivated to do so because location tracking is important to the profile consolidation system described in Doughty, and therefore, a POSITA would have understood the importance of determining the user’s location even if the user opted-out of sharing location data.” *Id.* at 29–30 (citing Ex. 1008, 15:18–48, 17:57–59, 20:52–64; Ex. 1007 ¶¶ 162–164).

Petitioner notes that, according to Van Boucq, “[i]f said Internet user refuses to be geolocated or ignores the pop-up, the communication system will still locate the Internet user according to the IP address 290 of that user’s connection to a computer network.” *Id.* at 30 (alteration in original) (emphasis omitted) (citing Ex. 1009 ¶ 63; Ex. 1007 ¶¶ 163–164). In addition, Petitioner contends that Van Boucq discloses determining that the user opted-in to location tracking based upon a location tracker (cookie) already being installed on the user’s device, consistent with Patent Owner’s proposed construction. *Id.* (citing Ex. 1007 ¶¶ 163–164). Petitioner contends that a POSITA “would have understood, or it would have been obvious, that this location tracking cookie could be a third-party or first-party cookie because those were the two types of commonly used cookies.” *Id.* at 30–31 (citing Ex. 1007 ¶¶ 163–164).

Petitioner submits “that checking for this cookie would have been an efficient means of determining whether the user opted-out of location tracking, particularly given that Doughty already recognizes the possibility that the user opted-out of third-party cookies.” *Id.* at 31 (citing Ex. 1008, 17:24–27; Ex. 1007 ¶¶ 163–164). Petitioner argues that a POSITA “would have been motivated to combine this method of determining when the user opted-out of location sharing with the system in Doughty because, as described above and in 1[c], a POSITA would have understood the importance of determining the user’s location for profile consolidation.” *Id.* (citing Ex. 1008, 19:37–49; Ex. 1007 ¶¶ 163–164).

Patent Owner argues that neither Doughty nor Van Boucq teach this limitation. *See* Prelim. Resp. 25–29. Patent Owner asserts that “Doughty does not determine whether the user opted-in to or out of location tracking, based on whether a location tracker (i.e., third-party cookie) is installed on

the user computing device because in the cited sections Doughty determines whether ‘pixel tags’ can be used for monitoring.” *Id.* at 26. Patent Owner argues that Doughty already teaches a technique for identifying the user that is different than that claimed. *Id.* Further, Patent Owner asserts that “Doughty teaches techniques for mapping unidentified user devices to other devices, which is the purpose of Doughty.” *Id.* (citing Ex. 1008, 11:1–25).

As for Van Boucq, Patent Owner contends Van Boucq’s cookie is a “first party” cookie, not a “third-party” cookie. *Id.* at 27 (citing Ex. 1009 ¶¶ 60, 63, 67). Thus, Patent Owner submits that Van Boucq does not look for a cookie in the web browser that was created by a third party, as required by the agreed upon construction for “location tracker.” *Id.*

We find that Petitioner has shown sufficiently that the combination of Doughty and Van Boucq teach this limitation. As Petitioner explains, both Doughty and Van Boucq teach that users can decline to be geo-located. *See* Pet. 28–29 (citing Ex. 1008, 17:24–27; Ex. 1007 ¶ 159–161; Ex. 1009 ¶ 63). Moreover, both systems recognize the importance of geo-locating users even if they opt out of geo-locating. *See id.* (citing Ex. 1008, 15:18–48, 17:57–59, 20:52–64). On this record, we agree with Petitioner that a POSITA would have recognized in view of Van Boucq’s teachings that the system can check for the presence of cookies as a way of determining whether a user has opted out of geo-locating. *Id.* We also find that Petitioner has shown sufficiently that a POSITA would have recognized that this applies to both first-party and third-party cookies. *Id.*

Patent Owner’s argument that Doughty discloses “pixel tags” not cookies (Prelim. Resp. 25–26) is not availing because, in the combination, Petitioner proposes incorporating Van Boucq’s teachings of also looking for cookies, not just pixel tags. As for Patent Owner’s arguments that Doughty

already solves this problem (Prelim. Resp. 26), we address that argument below with respect to limitation 1[f]. Finally, with regard to Patent Owner’s arguments that Van Boucq only discloses looking for first-party cookies, not third-party cookies as the agreed upon construction of “location tracker” requires, we find that Petitioner has shown sufficiently, at this stage, that, in the combined system, a POSTIA would have recognized that the location tracker cookie could be either a first-party or third-party cookie, and would have been motivated to look for third-party cookies as an efficient means of determining whether a user has opted-out of location tracking. *See* Pet. 30–31 (citing Ex. 1007 ¶¶ 163–164). Thus, regardless of the type of cookie used in Van Boucq, Petitioner has shown sufficiently, at this stage of the proceeding, that the combination would suggest looking for both first-party and third-party cookies as explained by Mr. Williams. *See* Ex. 1007 ¶¶ 163–164.

Accordingly, we find that Petitioner has shown sufficiently, on this record, that the combination of Doughty and Van Boucq accounts for limitation 1[e]. Patent Owner should feel free to continue to develop the record on this issue during trial.

g) 1[f]: sending, upon determining that the user opted-out of location tracking, the unique identifier to the user computing device for storage in a local browser cache

Petitioner contends Doughty in combination with Van Boucq renders obvious this limitation. Pet. 31–33. Petitioner submits that Van Boucq further discloses that, upon determining that the user opted-out of geolocation, the system “result[s] in the creation of a cookie.” *Id.* at 31 (alteration in original) (citing Ex. 1009 ¶ 63). Petitioner argues that a POSITA “would have understood that the ‘creation of a cookie’ is typically

accomplished by a server sending a cookie—which would contain a unique ID for the user—to the user’s device.” *Id.* at 31–32 (citing Ex. 1007 ¶ 165).

Petitioner asserts that a POSITA “also would have understood that cookies are typically stored in the local browser cache for the user.” *Id.* at 32 (citing Ex. 1007 ¶ 165).

Petitioner notes that “[t]o the extent that Patent Owner argues that Van Boucq only discloses storing third-party cookies, nothing in the claims or in the proposed constructions precludes using a third-party cookie to store the unique identifier.” *Id.* Petitioner argues that “it would have also been obvious to a POSITA to use a first-party cookie or other tracking mechanism instead of a third-party cookie if third-party cookies were disabled, which Doughty recognizes could happen.” *Id.* (citing Ex. 1008, 17:24–27; Ex. 1007 ¶ 165). Petitioner submits that “Doughty discloses ‘serv[ing]’ a cookie or other file (e.g., pixel tag) to be stored on the user’s device.” *Id.* (citing Ex. 1008, 16:59–17:5). Petitioner contends that a POSITA “would have understood that the cookies disclosed in Doughty could be first-party cookies and pixel tags, which are not third-party cookies.” *Id.* (citing Ex. 1008, 17:12–14; Ex. 1007 ¶ 166).

Petitioner asserts that “[i]n view of Doughty’s and Van Boucq’s teachings, a POSITA therefore would have found it obvious to send a cookie with a unique ID, or another file like a pixel tag, with a unique ID for storage in the local browser cache upon determining that the user opted-out of location tracking.” *Id.* (citing Ex. 1007 ¶ 166).

Patent Owner argues Petitioner fails to establish that the combination of Doughty and Van Boucq accounts for this limitation. First, Patent Owner asserts that Petitioner fails to show “upon determining that the user has opted out of location tracking” based on the arguments discussed above with

respect to limitation 1[e]. *See* Prelim. Resp. 29–31. Second, Patent Owner argues that Petitioner fails to show the references teach “sending . . . the unique identifier to the user computing device for storage in a local browser cache.” *Id.* at 31. Patent Owner asserts that Van Boucq does not disclose where the “connection cookie” is saved. *Id.* As for Doughty, Patent Owner argues that Doughty discloses using an email to identify the user when pixel tags are not available . . . , not saving an identifier in local browser cache.” *Id.* (citing Ex. 1009 17:28–33).

We find that Petitioner has shown sufficiently, on this record, that the combination of Doughty and Van Boucq accounts for this limitation. *See* Pet. 31–33. As we explained above, we find that Petitioner has shown sufficiently that the combination accounts for determining that the user has opted out of location tracking. We also find Van Boucq teaches the “creation of a cookie” upon determining that the user has opted out of location tracking, and that, based on the teachings of Doughty, this would involve sending the cookie to be stored on the user’s device. *Id.* at 31–32 (citing Ex. 1009 ¶ 63; Ex. 1008, 16:59–17:5). Petitioner also shows sufficiently that the cookie would contain the unique identifier because it allows the system to identify the user by the unique identifier later. *See id.* at 33 (citing 16:59–17:27; Ex. 1007 ¶ 167). As for Patent Owner’s argument that Petitioner fails to show storage in the browser cache, we find that Petitioner has provided sufficient evidence, at this stage, to account for this limitation. At this stage, we find Mr. Williams’s testimony that a POSITA would understand that such cookies are generally stored in the browser’s cache to be sufficient. Patent Owner is free to develop the record further on this point. Finally, we find, on the current record, that Petitioner has shown sufficiently a POSITA would have looked to improve the efficiency of

Doughty by incorporating Van Boucq’s teachings regarding cookies, notwithstanding its other possible solutions to tracking users.

Accordingly, we find that Petitioner has shown sufficiently that the combination of Doughty and Van Boucq accounts for this limitation.

- h) *l[g]: determining a latitude coordinate and a longitude coordinate of the user computing device, during the first browser session, wherein the latitude coordinate and the longitude coordinate are determined based on the first anonymous data upon determining that the user opted-out of location tracking, and wherein the latitude coordinate and the longitude coordinate are determined based on geo-location data retrieved from the user computing device upon determining that the user opted-in to location tracking*

Petitioner contends Doughty in combination with Van Boucq renders obvious this limitation. Pet. 33–35. In addition to the discussion above of determining whether the user opted-in to or opted-out of location tracking and tracking anonymous information, including URLs accessed and location data, during a first browser session, Petitioner relies on Van Boucq’s teachings of “opt-in” and “opt-out,” and use of latitude and longitude. *Id.*

In particular, Petitioner notes that Van Boucq further teaches, when the system determines the user opted-in, the system may determine the location of the user in a number of ways, including “via a Web browser geolocation service” or in a “cookie” where the user has already previously been geolocated. *Id.* at 33–34 (citing Ex. 1009 ¶¶ 8, 63). Petitioner argues that “[i]n either case, a POSITA would have understood that the location is ‘determined based on geolocation data retrieved from the user’s computing device’—either from the browser or a cookie on the local browser cache . . .

, both of which are on the user’s computer.” *Id.* at 34 (citing Ex. 1007 ¶ 169).

Petitioner also notes that “[w]hen the system determines the user opted-out, Van Boucq states that the user can be geolocated ‘according to the IP address 290 of that user’s connection to a computer network.’” *Id.* (citing Ex. 1009 ¶63). Petitioner contends that a POSITA “would have understood that the location is therefore determined based upon the IP address of the user’s connection.” *Id.* (citing Ex. 1001, 6:44–47; Ex. 1007 ¶ 170). Petitioner also asserts that location includes latitude and longitude coordinates of the user’s computing device. *Id.* (citing Ex. 1007 ¶ 171; Ex. 1009 ¶¶ 9, 56; Ex. 1008, 6:55–7:10, 16:9–27).

At this time, Patent Owner does not dispute that the combination discloses limitation 1[g]. *See* Prelim Resp. 18. At this stage of the proceeding, based on Petitioner’s arguments and evidence, we find that Petitioner has shown sufficiently that the combination discloses this limitation.

- i) *1[h]: identifying a physical address for the user based on the determined latitude coordinate and the determined longitude coordinate using a map application programming interface (API)*

Petitioner contends Doughty in combination with Van Boucq renders obvious this limitation. Pet. 35–36. Petitioner notes that Doughty over Van Boucq describes determining the latitude and longitude of the user, whether the user opted-in to or out of location tracking. *Id.* at 35. Petitioner submits that Van Boucq further recognizes that geolocation can involve APIs, such as those associated with a browser like “Google Service Location,” “Microsoft Service Location,” and “Apple Location Service.” *Id.* (citing Ex. 1009 ¶¶ 31–36). Petitioner argues that a POSITA “would have

understood that each of those services also can be used to turn latitude/longitude coordinates into physical addresses.” *Id.* (citing Ex. 1007 ¶ 173). Petitioner asserts that “[c]onverting latitude/longitude coordinates into physical addresses, a process called ‘reverse geocoding,’ was well-known by at least 2020 (i.e., before the earliest priority date).” *Id.* (citing Ex. 1007 ¶ 173; Ex. 1010, 9:19–25; Ex. 1020; Ex. 1021; Ex. 1022; Ex. 1023; Ex. 1024; Ex. 1025, 35). Petitioner submits that “[b]ecause Doughty specifically discloses storing home, work, and billing addresses (i.e., real, physical addresses), a POSITA would have been motivated to use these reverse geocoding APIs to turn the geographic coordinates into physical addresses based on those coordinates.” *Id.* at 36 (citing Ex. 1007 ¶ 174).

At this time, Patent Owner does not dispute that the combination discloses limitation 1[h]. *See* Prelim Resp. 18. At this stage of the proceeding, based on Petitioner’s arguments and evidence, we find that Petitioner has shown sufficiently that the combination discloses this limitation.

j) *1[i]: associating the unique identifier to the physical address*

Petitioner contends Doughty alone discloses and/or renders obvious this limitation. Pet. 36–37. Petitioner submits that Doughty discloses creating a user profile connected with a unique ID, and that the profile/ID may be associated with a lot of information, including “home address,” “work address,” and “billing address,” each of which are physical addresses. *Id.* (citing Ex. 1008, 8:13–56; Ex. 1007 ¶ 175). Petitioner argues that “[t]he system therefore associates the physical addresses stored in the profile with the unique ID.” *Id.* at 37 (citing Ex. 1007 ¶ 175). Petitioner asserts that “[a]lternatively, it would have been obvious to a POSITA that the system

associates the physical address with the user's unique ID given that this information is all stored in the user's profile in which the information is associated.” *Id.* (citing Ex. 1007 ¶ 176).

At this time, Patent Owner does not dispute that the combination discloses limitation 1[i]. *See* Prelim Resp. 18. At this stage of the proceeding, based on Petitioner's arguments and evidence, we find that Petitioner has shown sufficiently that the combination discloses this limitation.

- k) *1[j]: generating a user profile for the user using the unique identifier and physical address, the user profile comprising profile information that comprises one or more URLs the user has accessed, a frequency with which the user accessed the URL(s), demographics associated with the user, the physical address(es) associated with the user, or devices associated with the user*

Petitioner contends Doughty alone discloses and/or renders obvious this limitation. Pet. 37–38. Petitioner argues that “if the user does not yet have a unique ID, Doughty discloses that the system will generate a universal profile for that user that is associated with the unique ID.” *Id.* at 37. Petitioner notes that “Doughty further discloses that the profile will include the physical address(es) of the user.” *Id.* Petitioner submits that

According to Doughty, moreover, in addition to the unique ID and physical address, the profile will also include: “(a) a URL of each respective web page; (b) a time of visiting each respective web page; (c) a duration of visiting each respective web page; (d) an order in which each web page is visited; and (e) a geographic location of the first and second device at the time of visiting each respective web page.”

Id. at 37–38 (citing Ex. 1008, 6:19–25). Petitioner asserts that a POSITA “would have understood that, by storing information about the order, time,

and duration the user visited each web page, the system necessarily is tracking the frequency with which the user accessed the URLs.” *Id.* at 38 (citing Ex. 1007 ¶¶ 177–180). Petitioner notes that Doughty further discloses that the profile will include demographic information like age, gender, race, religion, and marital status, as well as information about the model of the user’s devices. *Id.* (citing Ex. 1008, 8:35–56). Petitioner argues that “because Doughty discloses tracking the user across a plurality of devices, a POSITA would have understood that the profile contains information about the devices associated with the user, including the model number as set forth above.” *Id.* (citing Ex. 1007 ¶¶ 177–180).

At this time, Patent Owner does not dispute that the combination discloses limitation 1[j]. *See* Prelim Resp. 18. At this stage of the proceeding, based on Petitioner’s arguments and evidence, we find that Petitioner has shown sufficiently that the combination discloses this limitation.

- l) *1[k]: updating the profile information based on second anonymous data associated with a second browser session initialized on the user computing device or another user computing device associated with the physical address*

Petitioner contends Doughty discloses and/or renders obvious this limitation. Pet. 38–39. Petitioner notes that Doughty discloses that the user’s profile “may be updated to add or delete further correlations between data, devices, etc.” *Id.* at 38 (citing Ex. 1008, 16:28–37). Petitioner argues that a POSITA “would have recognized that this would occur in a second (i.e., separate) browsing session.” *Id.* at 39 (citing Ex. 1007 ¶ 182).

Petitioner submits that

Doughty recognizes that the same user may use multiple devices—each of which would have its own browsing session—and discloses updating the same profile based upon, for example, the location information from each of the devices, such as the user’s location being the same or the device types being consistent.

Id. (citing Ex. 1008 8:35–56, 15:18–48, 16:38-50; Ex. 1007 ¶ 182).

Petitioner asserts that “[t]his type of information is ‘anonymous data,’ as recognized by the ’947 Patent.” *Id.* (citing cl. 1[a] (claiming “location data” as “anonymous data”)).

Petitioner also contends that it would have been obvious to update the user’s profile with anonymous information from a second browsing session because a POSITA would have understood that the more information collected about the user, the better the system can serve relevant ads. *Id.* (citing Ex. 1007 ¶ 183).

At this time, Patent Owner does not dispute that the combination discloses limitation 1[k]. *See* Prelim Resp. 18. At this stage of the proceeding, based on Petitioner’s arguments and evidence, we find that Petitioner has shown sufficiently that the combination discloses this limitation.

m) 1[l]: identifying a second visit to the URL during the second browser session using the unique identifier stored in the local browser cache

Petitioner contends “Doughty alone discloses and/or renders obvious this limitation.” Pet. 39. Petitioner notes that Doughty discloses tracking the URLs of “each respective web page,” including “an order in which each web page is visited.” *Id.* (citing Ex. 1008, 6:19–25). Petitioner argues that a POSITA “would have understood that, by tracking respective web pages and the order in which they are visited, the system can determine that the same

URL visited in the first browsing session in 1[b] is also visited in a second browsing session in 1[k], which could be on a different device.” *Id.* at 39–40 (citing Ex. 1007 ¶ 184). Petitioner asserts that “Doughty discloses updating the user’s profile to identify ‘further correlations between data,’ and a POSITA would have understood that a second visit by the same user to the same URL in a subsequent browsing session would have been data tracked by the profile associated with that user, and thus, also by the unique identifier for that user.” *Id.* at 40 (citing Ex. 1008, 6:19–25; Ex. 1007 ¶ 185). Petitioner contends that a POSITA “would have understood that the unique identifier of the user stored in the local browser cache would have been the mechanism for how the two separate browsing sessions would be attributed to the same user, even across devices.” *Id.* (citing Ex. 1007 ¶ 186).

Patent Owner argues “Petitioner’s citation to Doughty concerns a back-end server linking saved universal profiles for two devices by comparing location information to the user behavior data.” Prelim. Resp. 32. Patent Owner asserts that none of the cited portions of “Doughty . . . disclose identifying a second visit to the URL during the second browsing session, much less ‘identifying . . . using the unique identifier stored in the local browser cache’ as claimed.” *Id.* at 32–33 (second alteration in original).

We find that Petitioner has shown sufficiently that Doughty teaches or suggests this limitation. Patent Owner is correct that none of the cited portions expressly describe “identifying a second visit to the URL” as claimed. However, that is not what Petitioner argued. As Petitioner explains, supported with citations to Doughty and Mr. Williams’s testimony, the actions described in Doughty would have suggested “identifying a

second visit to the URL during the second browser session using the unique identifier stored in the local browser cache” to a POSITA. At this stage, we find this reasoning sufficiently supported, and find that Petitioner has shown sufficiently that Doughty would suggest this limitation to a POSITA.

- n) *1[m]: determining, using the updated profile information, a confidence rating for the user, the confidence rating indicating a quantifiable measure of the user's interest in a product*

Petitioner contends Doughty discloses and/or renders obvious this limitation. Doughty discloses determining a “relevancy score” (i.e., “confidence rating”) based upon the user’s profile and the set of advertisements in the sponsor database. Pet. 40 (citing Ex. 1008, 13:4–33). Petitioner argues that “[t]his relevancy score is a quantifiable measure of the user’s interest in the product or service in the advertisement.” *Id.* at 40–41 (citing Ex. 1007 ¶ 188). Petitioner notes that “the stated purpose of the relevancy score is to ‘select[] a sponsored content based on a relevancy thereof with the universal profile.’” *Id.* at 41 (alteration in original) (citing Ex. 1008, 8:35–56).

Petitioner further argues that,

Alternatively, it would have been obvious to a POSITA that the relevancy score in Doughty, which is a quantifiable score (i.e., number), would be calculated to indicate the measure of the user’s interest in a product from the sponsor database (i.e., the “relevanc[e]” to the user) because that is the purpose of the “relevancy score.”

Id. (citing Ex. 1007 ¶ 189).

At this time, Patent Owner does not dispute that the combination discloses limitation 1[m]. *See* Prelim Resp. 18. At this stage of the

proceeding, based on Petitioner’s arguments and evidence, we find that Petitioner has shown sufficiently that the combination discloses this limitation.

- o) 1[n]: generating one or more notifications based on one or more of the updated profile information or the confidence rating*

Petitioner contends Doughty discloses this limitation. Pet. 41. Petitioner argues that Doughty discloses “selecting a sponsored content based on a relevancy thereof with the universal profile” and generating a “push” notification that will be sent to the user. *Id.* (citing E. 1008, 8:35–40, 13:4–33; Ex. 1007 ¶ 190). Petitioner asserts that a POSITA “would have understood that ‘push’ refers to notifications that are ‘pushed’ or sent from a server to the device, e.g., Apple Push Notification Service (‘APNs’).” *Id.* (citing Ex. 1007 ¶ 190). Petitioner submits that Doughty discloses “transmitting the sponsored content to the second communication device for display thereon,” which a POSITA “would have again associated with a push notification.” *Id.* (citing Ex. 1008, 8:35–40; Ex. 1007 ¶ 190).

At this time, Patent Owner does not dispute that the combination discloses limitation 1[n]. *See* Prelim Resp. 18. At this stage of the proceeding, based on Petitioner’s arguments and evidence, we find that Petitioner has shown sufficiently that the combination discloses this limitation.

- p) 1[o]: determining when to send the one or more notifications to the user*

Petitioner contends that Doughty discloses this limitation. Pet. 42. Petitioner argues that Doughty discloses determining when to send the push notification to the user based upon the relevancy score. *Id.* (citing Ex. 1008,

12:61–65 (“[A]dvertisements are sent only when the relevancy score is above a predetermined value or threshold.”); Ex. 1007 ¶ 191).

At this time, Patent Owner does not dispute that the combination discloses limitation 1[o]. *See* Prelim Resp. 18. At this stage of the proceeding, based on Petitioner’s arguments and evidence, we find that Petitioner has shown sufficiently that the combination discloses this limitation.

q) Conclusion

Accordingly, for the forgoing reasons, Petitioner establishes a reasonable likelihood of prevailing on its assertion that claim 1 would have been obvious in view of Doughty and Van Boucq.

3. Claims 2–20

Patent Owner does not raise any other separate arguments regarding claims 2–20 other than those we have considered above with respect to claim 1. *See* Prelim. Resp. 35 (explaining that the arguments for independent claim 1 also apply to independent claim 11, and the dependent claims inherent the deficiencies asserted with respect to the independent claims). On the current record, we do not find Patent Owner’s arguments availing, as explained above. We have reviewed Petitioner’s contentions regarding claims 2–20 (Pet. 42–53), and determine that Petitioner shows a reasonable likelihood of prevailing with respect to the obviousness of claims 2–20 over Doughty and Van Boucq.

E. Alleged Ground of Unpatentability Over Doughty, Van Boucq, and Maginnis

Petitioner contends that claims 1–20 of the ’947 patent would have been unpatentable under 35 U.S.C. § 103 as obvious over Doughty, Van Boucq, and Maginnis. Pet. 53–58.

Patent Owner argues that Ground II suffers from the same deficiencies as to the disclosures of Doughty and Van Boucq as discussed above with respect to Ground I. Prelim. Resp. 36. According to Patent Owner, “adding Maginnis to the mix does not cure the deficiencies of the teachings of Doughty and Van Boucq with respect to limitations 1[c], 1[e], 1[f] and 1[l].” *Id.* On the current record, we do not find Patent Owner’s arguments availing, as explained above. We have reviewed Petitioner’s contentions regarding claims 1–20 (Pet. 53–58), and determine that Petitioner shows a reasonable likelihood of prevailing with respect to the obviousness of claims 1–20 over Doughty, Van Boucq, and Maginnis.

IV. DISCRETION UNDER 35 U.S.C. § 314(A)

Patent Owner argues that we should exercise our discretion under 35 U.S.C. § 314(a) and deny institution. Prelim. Resp. 36–37.

Section 314(a) does not require the Director to institute an *inter partes* review. *See Harmonic Inc. v. Avid Tech., Inc.*, 815 F.3d 1356, 1367 (Fed. Cir. 2016) (“[T]he PTO is permitted, but never compelled, to institute an IPR proceeding.”). Rather, a decision whether to institute is within the Director’s discretion, and that discretion has been delegated to the Board. *See* 37 C.F.R. § 42.4(a); *Cuozzo Speed Techs., LLC v. Lee*, 136 S. Ct. 2131, 2140 (2016) (“[T]he agency’s decision to deny a petition is a matter committed to the Patent Office’s discretion.”).

In determining whether to exercise discretion to deny institution under § 314(a) on behalf of the Director due to parallel court proceeding(s), we are guided by the Board’s precedential decisions in *NHK Spring Co. v. Intriplex Techs., Inc.*, IPR2018-00752, Paper 8 (PTAB Sept. 12, 2018) (“*NHK*”), and *Apple Inc. v. Fintiv Inc.*, IPR2020-00019, Paper 11 (PTAB Mar. 20, 2020) (“*Fintiv*”). In *NHK*, the Board found that the “advanced state of the

district court proceeding” was a “factor that weighs in favor of denying” the petition under § 314(a). *NHK*, Paper 8 at 20. The Board determined that “[i]nstitution of an *inter partes* review under these circumstances would not be consistent with ‘an objective of the AIA . . . to provide an effective and efficient alternative to district court litigation.’” *Id.* (alteration in original) (quoting *Gen. Plastic Indus. Co. v. Canon Kabushiki Kaisha*, IPR2016-01357, Paper 19 at 16–17 (PTAB Sept. 6, 2017) (precedential as to § II.B.4.i)).

In *Fintiv*, the Board explained that “cases addressing earlier trial dates as a basis for denial under *NHK* have sought to balance considerations such as system efficiency, fairness, and patent quality.” *Fintiv*, Paper 11 at 5. *Fintiv* set forth the following six non-exclusive factors for determining “whether efficiency, fairness, and the merits support the exercise of authority to deny institution in view of an earlier trial date in the parallel proceeding”:

1. whether the court granted a stay or evidence exists that one may be granted if a proceeding is instituted;
2. proximity of the court’s trial date to the Board’s projected statutory deadline for a final written decision;
3. investment in the parallel proceeding by the court and the parties;
4. overlap between issues raised in the petition and in the parallel proceeding;
5. whether the petitioner and the defendant in the parallel proceeding are the same party; and
6. other circumstances that impact the Board’s exercise of discretion, including the merits.

Id. at 5–6. In evaluating these factors, we “take[] a holistic view of whether efficiency and integrity of the system are best served by denying or instituting review.” *Id.* at 6.

We address each of the *Fintiv* factors below.

A. Fintiv Factor 1: Whether the court granted a stay or evidence exists that one may be granted if a proceeding is instituted

Patent Owner contends that this factor weighs against institution because “Petitioner has not requested a stay.” Prelim. Resp. 36.

Petitioner asserts that, “[i]f this proceeding is instituted, a stay is likely to be granted. This factor weighs against discretionary denial.” Pet. 60.

Because a stay has not be granted, and we have no basis to speculate that a stay may be granted in the future, we determine that the considerations of the first *Fintiv* factor are neutral.

B. Fintiv Factor 2: Proximity of the court’s trial date to the Board’s projected statutory deadline for a final written decision;

Patent Owner contends that this factor weighs against institution because “[n]o trial date has been scheduled.” Prelim. Resp. 36–37 (citing Ex. 2010).

Petitioner asserts that, “according to the most recently available statistics from June 2024, the average time-to-trial for civil cases in the Middle District of North Carolina is 30.5 months.” Pet. 60 (citing Ex. 1027). Petitioner contends that this means that a trial would likely be held around November 2026—six months after the statutory deadline that would apply to these proceedings.

We find this *Fintiv* factor weighs strongly in favor of institution. No trial date has been scheduled, and under average time-to-trial the trial will likely not occur until six months after any Final Written Decision in this case. Thus, this factor weighs strongly against exercising our discretion to deny institution.

C. Fintiv Factor 3: Investment in the parallel proceeding by the court and the parties;

Patent Owner contends that this factor weighs against institution because “[a] motion to dismiss has been briefed and is pending,” and “the parties and the Court have made a substantial investment in the District Court proceedings.” Prelim. Resp. 37 (citing Ex. 2010).

Petitioner argues that this factor favors institution because, in the parallel proceeding, “[t]he parties have not engaged in any discovery and no schedule has been entered.” Pet. 60 (citing Ex. 1028).

We agree with Petitioner that Factor 3 weighs against discretionary denial. The parties have not engaged in any discovery and no schedule is entered. Although there has been briefing on a motion to dismiss, we do not find that investment to be significant. Thus, we find that Factor 3 weighs against discretionary denial.

D. Fintiv Factor 4: Overlap between issues raised in the petition and in the parallel proceeding;

Patent Owner contends that this factor weighs against institution because “Petitioner is likely to assert prior art defenses in the pending litigation that overlap with those asserted in this petition.” Prelim. Resp. 37.

Petitioner acknowledges that there is overlap between the Petition and the issues raised in the parallel proceeding. Pet. 61. However, Petitioner “stipulates that, if an IPR is instituted on the grounds set forth in this Petition, it will not pursue in the Parallel proceedings the specific grounds asserted in the Petition against the Challenged Claims.” *Id.* (citing *Sand Revolution II, LLC v. Continental Intermodal Group – Trucking LLC*, IPR2019-01393, Paper 24, 7 (PTAB June 16, 2020)).

We find that that Factor 4 weighs slightly against discretionary denial. Petitioner's stipulation does somewhat mitigate the level of overlap, but it does not completely eliminate it. Thus, we find that this factor only weighs slightly against discretionary denial.

E. Fintiv Factor 5: Whether the petitioner and the defendant in the parallel proceeding are the same party; and

Patent Owner contends that this factor weighs against institution because the parties in this proceeding are the same as those in the parallel proceeding. Prelim. Resp. 37.

Petitioner acknowledges that the parties are the same, but argues that it offers the stipulation considered above and contends that the merits of the challenge presented in the Petition favors institution. Pet. 61.

The parties are the same between this proceeding and the parallel proceeding. We consider Petitioner's arguments in our discussion of Factors 4 and 6. Thus, Factor 5 weighs in favor of discretionary denial.

F. Fintiv Factor 6: other circumstances that impact the Board's exercise of discretion, including the merits

Fintiv instructs us to look at "other circumstances," and "if the merits of a ground raised in the petition seem particularly strong on the preliminary record, this fact has favored institution." *Fintiv*, Paper 11 at 14–15.

Patent Owner contends that this factor weighs against institution because the parallel district court proceeding also involves a patent related to the '947 patent that has not been challenged by Petitioner before the Office, and "efficiency makes sense for one tribunal to address Petitioner's prior art allegations against the patent family." Prelim. Resp. 37.

Petitioner argues that the merits of the Petition are compelling, and thus, strongly favor institution.

We find this factor weighs marginally against denial. Although there are other, unchallenged patents in the district court proceeding, given the lack of a trial date and early stage of the proceeding, there are still advantages of allowing some of the issues to be decided here, which would allow the parties and district court to focus on the unchallenged patents. As for the merits, we find that they are sufficient to meet the reasonable likelihood standard, but do not believe they are “compelling” as the Petitioner argues, so they do not weigh significantly in our analysis.⁶

G. Balancing the Fintiv Factors

A holistic balancing of the *Fintiv* factors weighs against discretionary denial. As discussed above, Factors 2 and 3 weigh heavily against denial. Factors 4 and 6 weigh marginally against denial, Factors 1 is neutral, and Factor 5 weighs against denial. Thus, on balance, the evidence of record weighs against exercising our discretion to deny institution of *inter partes* review.

V. CONCLUSION

For the foregoing reasons, we conclude that the information presented in the Petition establishes a reasonable likelihood that Petitioner would prevail in showing that at least one of claims 1–20 of the ’947 patent would have been unpatentable. Our determination at this stage of the proceeding is

⁶ Although we consider the strength of the merits as part of a balanced assessment of all the relevant circumstances in the case, “compelling merits alone is not dispositive in making the assessment [under *Fintiv*].” Scott R. Boalick, “Guidance on USPTO’s recission of ‘Interim Procedure for Discretionary Denials in AIA Post-Grant Proceedings with Parallel District Court Litigation” (March 24, 2025), *available at* https://www.uspto.gov/sites/default/files/documents/guidance_memo_on_interim_procedure_recission_20250324.pdf.

based on the evidentiary record currently before us. This decision to institute trial is not a final decision as to patentability of any claim for which *inter partes* review has been instituted. Our final decision will be based on the full record developed during trial.

VI. ORDER

In consideration of the foregoing, it is hereby:

ORDERED that, pursuant to 35 U.S.C. § 314(a), an *inter partes* review of claims 1–20 of the '947 patent is hereby instituted on all grounds of unpatentability set forth 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 commencing on the entry date of this decision.

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