

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

APPLE INC.,
Petitioner,

v.

GEOSCOPE TECHNOLOGIES PTE. LTD.,
Patent Owner.

IPR2024-00255
Patent 7,561,104 B2

Before PATRICK R. SCANLON, SHEILA F. McSHANE, and
BRIAN D. RANGE, *Administrative Patent Judges*.

SCANLON, *Administrative Patent Judge*.

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

I. INTRODUCTION

Apple Inc. (“Petitioner”) filed a Petition (Paper 2, “Pet.”) requesting an *inter partes* review (“IPR”) of claims 1–4 and 6–11 of U.S. Patent No. 7,561,104 B2 (Ex. 1001, “the ’104 patent”). Geoscope Technologies Pte. Ltd. (“Patent Owner”) filed a Preliminary Response (Paper 11, “Prelim. Resp.”).

We have authority to determine whether to institute an *inter partes* review. *See* 35 U.S.C. § 314 (2018); 37 C.F.R. § 42.4(a) (2022). To institute an *inter partes* review, we must determine that the information presented in the Petition shows “a reasonable likelihood that the petitioner would prevail with respect to at least 1 of the claims challenged in the petition.” 35 U.S.C. § 314(a). For the reasons set forth below, we determine that Petitioner has demonstrated a reasonable likelihood that it would prevail with respect to at least one challenged claim. Accordingly, we institute an *inter partes* review of the challenged claims on the grounds set forth in the Petition.

Our factual findings and conclusions at this stage of the proceeding are based on the evidentiary record developed thus far. This is not a final decision as to patentability of the challenged claims. Any final decision will be based on the full trial record, including any response to the Petition timely filed by Patent Owner.

II. BACKGROUND

A. *Real Parties in Interest*

Petitioner identifies itself as the real party in interest. Pet. 82. Patent Owner identifies itself as the real party in interest. Paper 8, 2.

B. Related Matters

The parties identify the following matters as related to this proceeding:

Geoscope Technologies Pte. Ltd. v. Google LLC f/k/a Google Inc., No. 1:22-cv-01331-MSN (E.D. Va.) (filed Nov. 22, 2022) (“the Google Action”);

Geoscope Technologies Pte. Ltd. v. Apple Inc., No. 1:22-cv-01373-MSN (E.D. Va.) (filed Dec. 1, 2022) (“the Apple Action”); and

Google LLC v. Geoscope Technologies Pte. Ltd., IPR2023-01209.

Pet. 82–83; Paper 8, 2.

Patent Owner additionally identifies the following matters as related to this proceeding:

Google LLC v. Geoscope Technologies Pte. Ltd., IPR2023-01210, IPR2023-01211, IPR2023-01212 and IPR2023-01213;

Geoscope Technologies Pte. Ltd. v. Google LLC, No. 24-1003 (Fed. Cir.) (docketed Oct. 2, 2023);

Geoscope Technologies Pte. Ltd. v. Apple, Inc., No. 24-1018 (Fed. Cir.) (docketed Oct. 5, 2023); and

Apple Inc. v. Geoscope Technologies Pte. Ltd., IPR2024-00031, IPR2024-00032, and IPR2024-00259.

Paper 8, 2–3.

C. The '104 Patent

The '104 patent, titled “Method to Modify Calibration Data Used to Locate a Mobile Unit,” issued July 14, 2009, with claims 1–21. Ex. 1001,

codes (45), (54), 11:65–14:22.¹ The ’104 patent explains that “[w]hen a wireless device is located indoors, the signal strengths of signals received from the serving and/or neighboring base stations tend to be lower than the strength of the signals received by a wireless device located outdoors,” which may result in “poor estimated location accuracy.” *Id.* at 1:32–40. The ’104 patent aims to address this issue with its method of locating a mobile station in an indoor facility, in which calibration data samples obtained outdoors are used to simulate indoor calibration data. *Id.* at 3:38–42; *see also id.* at 1:46–54.

In one embodiment of the ’104 patent, the method includes “providing a database of previously-gathered calibration data for a region in a wireless network including a first transmitter and a second transmitter,” “collecting observed network measurement data including a first and second signal characteristic from the first and second transmitters,” “determining which of the first and second signal characteristics has a greater magnitude,” modifying “[t]he observed network measurement data . . . using the greater magnitude signal characteristic,” and comparing “the modified network measurement data . . . with the database of calibration data to determine the location of the mobile station.” Ex. 1001, 2:9–22; *see also id.* at 1:65–2:34, 3:38–49, 9:54–64, Fig. 3. The ’104 patent also describes that “a non-uniform grid point (NUG) may represent the signal characteristics and/or calibration data over a given region.” *Id.* at 3:50–52. In one example, “a set

¹ A Reexamination Request of the ’104 patent was filed September 24, 2012, and following an *ex parte* reexamination of the ’104 patent, an *Ex Parte* Reexamination Certificate for the ’104 patent issued August 18, 2014. Ex. 1001, 19–20.

of NUGs . . . are . . . part of a larger geographical region . . . includ[ing] various wireless networking components,” where “[t]he NUGs represent an area of collected calibration data, which may be stored in a database for easy retrieval during a calibration data comparison operation between the NUG and a received network measurement report (NMR).” *Id.* at 3:52–60.

D. Challenged Claims

Of the challenged claims, claim 1 is the sole independent claim. The district court in both the Google Action and the Apple Action has ruled that claims 1 and 2 of the ’104 patent are patent ineligible under 35 U.S.C. § 101. Ex. 2008, 5–18; Ex. 1051, 5–18. The district court entered judgment on the patent eligibility in both cases. Ex. 2009; Ex. 2010. Patent Owner appealed the district court’s patent ineligibility decisions to the United States Court of Appeals for the Federal Circuit, arguing that claim 2 of the ’104 patent is patent eligible under § 101; Patent Owner did not, however, appeal the district court’s patent ineligibility decisions with respect to claim 1. *See* Prelim. Resp. 2; Ex. 2015. Although not appealed, claim 1 has not been disclaimed by Patent Owner. Furthermore, claim 2 includes all the limitations of claim 1 by virtue of depending from claim 1.² Claims 1 and 2 are reproduced below:

1. A method for determining a location of a mobile station, comprising:
providing a database of previously-gathered calibration data for a predetermined region in a wireless network, wherein said network includes a first transmitter and a second transmitter;

² We invite the parties to address at trial whether or not claim 1 (adjudicated unpatentable with no appeal pending) has any remaining legal importance and whether or not it is appropriate for the Board to reach a final written decision as to claim 1.

- collecting observed network measurement data including a first signal characteristic from said first transmitter and a second signal characteristic from said second transmitter;
 - determining which of said first and second signal characteristics has a greater magnitude;
 - modifying said observed network measurement data using the greater magnitude signal characteristic; and
 - comparing said modified network measurement data with said database of calibration data to thereby determine the location of the mobile station.
2. The method of claim 1 wherein said database comprises previously-gathered calibration data for one or more non-uniform grid points within said region.

Ex. 1001, 11:66–12:18.

E. Asserted Grounds of Unpatentability

Petitioner contends that the challenged claims are unpatentable based on the following grounds:

Claims Challenged	35 U.S.C. § ³	Reference(s)/Basis
1, 3, 4, 6–11	103(a)	Bhattacharya, ⁴ Zeng ⁵
1–4, 6–11	103(a)	Bhattacharya, Zeng, Spain ⁶

³ The Leahy-Smith America Invents Act (“AIA”), Pub. L. No. 112-29, 125 Stat. 284, 287–88 (2011), amended 35 U.S.C. § 103, effective March 16, 2013. Because the challenged claims of the ’104 patent have an effective filing date before March 16, 2013, the pre-AIA version of 35 U.S.C. § 103 applies.

⁴ U.S. 2006/0211376 A1, published Sept. 21, 2006 (Ex. 1005).

⁵ Qing-An Zeng & Dharma P. Agrawal, “Chapter 1 - Handoff in Wireless Mobile Networks,” “Handbook of Wireless Networks and Mobile Computing,” John Wiley & Sons, Inc., 2002, 1-25 (Ex. 1006).

⁶ US 2006/0240843 A1, published Oct. 26, 2006 (Ex. 1007).

Pet. 1. Petitioner relies on the Declaration of Dr. Karthikeyan Sundaresan (Ex. 1003) to support its challenges.

III. ANALYSIS

A. Level of Ordinary Skill in the Art

In determining whether an invention would have been obvious at the time it was made, 35 U.S.C. § 103 requires us to resolve the level of ordinary skill in the pertinent art at the time of the invention. *Graham v. John Deere Co.*, 383 U.S. 1, 17 (1966). The person of ordinary skill in the art is a hypothetical person who is presumed to have known the relevant art at the time of the invention. *In re GPAC, Inc.*, 57 F.3d 1573, 1579 (Fed. Cir. 1995). Factors that may be considered in determining the level of ordinary skill in the art include, but are not limited to, the types of problems encountered in the art, the sophistication of the technology, and educational level of active workers in the field. *Id.* In a given case, one or more factors may predominate. *Id.*

Petitioner relies on the testimony of Dr. Sundaresan to define the level of ordinary skill in the art. Pet. 7 n.2 (citing Ex. 1003 ¶¶ 8, 10, 26). Dr. Sundaresan testifies that a person having ordinary skill in the art “had at least a Bachelor’s degree in electrical engineering, computer science, or a similar discipline, and at least two years of experience in the field working with . . . navigation and/or geolocation systems,” and “[s]uperior education could compensate for a deficiency in work experience, and *vice-versa*.” Ex. 1003 ¶ 8. For the purposes of its Preliminary Response, Patent Owner does not dispute Petitioner’s definition of the level of ordinary skill in the art. Prelim. Resp. 32.

For purposes of this Decision, we adopt Petitioner’s proposal as reasonable and consistent with the ’104 patent and the prior art. *See*

Okajima v. Bourdeau, 261 F.3d 1350, 1355 (Fed. Cir. 2001) (the prior art may reflect an appropriate level of skill in the art).

B. Claim Construction

In *inter partes* reviews, the Board interprets claim language using the district-court-type standard, as described in *Phillips v. AWH Corp.*, 415 F.3d 1303 (Fed. Cir. 2005) (en banc). See 37 C.F.R. § 42.100(b). Under that standard, we generally give claim terms their ordinary and customary meaning, as would be understood by a person of ordinary skill in the art at the time of the invention, in light of the language of the claims, the specification, and the prosecution history. See *Phillips*, 415 F.3d at 1313–14. Although extrinsic evidence, when available, may also be useful when construing claim terms under this standard, extrinsic evidence should be considered in the context of the intrinsic evidence. See *id.* at 1317–19.

Petitioner proposes that all terms should be interpreted consistent with the *Phillips* standard. Pet. 2. Petitioner notes that, in the Google Action, the district court issued constructions for the terms: “calibration data,” “observed network measurement data,” and “grid point.” *Id.* at 2–3 (citing Ex. 1054). Petitioner also notes that, in the Apple Action, the parties have stipulated as to the order of the “collecting,” “modifying,” and “comparing” steps recited in claim 1. *Id.* at 3 (citing Ex. 1052). Petitioner, however, does not assert that any of these interpretations necessarily apply here; rather, Petitioner argues that “the Challenged Claims are obvious under any reasonable interpretation.” *Id.* (citing Ex. 1003 ¶¶ 26–28) (footnote omitted).

Patent Owner “does not dispute Petitioner’s statement on claim construction for the purposes of [the] Preliminary Response” and “reserves

the right to present arguments on the constructions should the Petition be instituted.”⁷ Prelim. Resp. 32.

For purposes of this Decision, we adopt the district court’s construction of “grid point” as “a point associated with representative calibration data for an area.” *See* Ex. 1054, 18–20. This construction is consistent with the claim language and the specification of the ’104 patent and is further supported by the reasoning provided by the district court’s claim construction order. *See id.* We do not discern a need to construe explicitly any other claim language at this juncture because doing so would have no effect on our analyses below of Petitioner’s asserted grounds and will not assist in resolving the present controversy between the parties. *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. Discretion Under 35 U.S.C. § 314(a)

Petitioner argues that we should not exercise discretion to deny institution under 35 U.S.C. § 314(a). Pet. 78–82. Patent Owner requests that we exercise our discretion under 35 U.S.C. § 314(a) to deny institution. Prelim. Resp. 3–20. Patent Owner generally contends that the two related district court litigations, the Google Action and the Apple Action, “have

⁷ In other sections of the Preliminary Response, Patent Owner appears to argue in favor of a particular construction of “grid point.” Prelim. Resp. 21–27; *see also id.* at 34 (“As further explained above in Section III, the district court concluded that ‘grid point,’ as used in the ’104 Patent, specifically refers to ‘a point associated with representative calibration data for an area’ that is **generated based on analysis of calibration data.**”). We disagree with these arguments for the reasons discussed below. *See infra* § III.E.3.

already resulted in final judgments stemming from the district court’s ruling that the asserted claims are unpatentable pursuant to 35 U.S.C. § 101.” Prelim. Resp. 3. Patent Owner asserts that because final judgments have already been reached by the district court’s rulings, institution should be denied in view of the *Fintiv* factors. *Id.* at 3–20.

Institution of *inter partes* review is at the Director’s discretion, which has been delegated to the Board under her guidance. *See* 35 U.S.C. § 314(a); *Harmonic Inc. v. Avid Tech., Inc.*, 815 F.3d 1356, 1367 (Fed. Cir. 2016) (“[T]he [USPTO] is permitted, but never compelled, to institute an IPR proceeding.”); 37 C.F.R. § 42.4(a) (“The Board institutes the trial on behalf of the Director.”).

Under Board precedent, one of the considerations that may weigh in favor of denying a petition under § 314(a) is the advanced state of a parallel district court action. *See NHK Spring Co. v. Intri-Plex Techs., Inc.*, IPR2018-00752, Paper 8 at 20 (PTAB Sept. 12, 2018) (precedential); Patent Trial and Appeal Board, Consolidated Trial Practice Guide (“CTPG”) 58, n.2 (Nov. 2019).⁸ In *Apple Inc. v. Fintiv, Inc.*, IPR2020-00019, Paper 11 (PTAB Mar. 20, 2020) (precedential), 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 (footnote omitted). *Fintiv* sets forth 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.” *Id.* at 6. The Director has also issued interim guidance to the Board on applying these factors. *See*

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

Katherine K. Vidal, Interim Procedure for Discretionary Denials in AIA Post-Grant Proceedings with Parallel District Court Litigation (June 21, 2022) 9, *available at* https://www.uspto.gov/sites/default/files/documents/interim_proc_discretionary_denials_aia_parallel_district_court_litigation_memo_20220621_.pdf (“Director Memo”).

We consider an advanced state of a parallel district court proceeding as a “factor that weighs in favor of denying the Petition under § 314(a).” *NHK*, Paper 8 at 20. Specifically, we consider an early trial date as part of a “balanced assessment of all relevant circumstances in the case, including the merits.” CTPG 58. As part of this balanced assessment, we consider the following factors:

1. whether the court granted a stay or evidence exists that one may be granted if this 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.

Fintiv, Paper 11 at 5–6. We address each factor below.

1. *Factor 1: whether the court granted a stay or evidence exists that one may be granted if this proceeding is instituted*

Petitioner argues that this factor is neutral because neither party has requested a stay, “and the Board does ‘not attempt to predict’ how an appeals or district court might adjudicate a future motion to stay.” Pet. 79.

In its Preliminary Response, Patent Owner argues that “this factor weighs in favor of exercising discretion to deny institution” because “the district court proceedings are closed pending the § 101 appeal to the Federal Circuit,” so “the district court **cannot** stay the litigation given the posture.” Prelim. Resp. 8 (citing *Snap Inc. v. Blackberry Ltd.*, IPR2020-00391, Paper 8 at 13 (PTAB July 13, 2020); *AviaGames, Inc. v. Skillz Platform, Inc.*, IPR2022-00530, Paper 12 at 12 (PTAB Aug. 9, 2022)).

As an initial matter, we do not agree with Patent Owner’s arguments that, because judgments have been entered in the district court actions, there is finality as that relates to *Fintiv* issues. In a similar instance, where a district court’s § 101 determination was appealed to the Federal Circuit, the Director determined that the Board had the authority to institute an *inter partes* review and a *Fintiv* analysis should be performed. See *Volvo Penta of the Americas, LLC v. Brunswick Corp.*, IPR2022-01366, Paper 15 at 1–8 (PTAB May 2, 2023). The Director has additionally distinguished a *Fintiv* analysis under similar circumstances to those here, where “the district court’s judgment of invalidity under 35 U.S.C. § 101, i.e., a statutory ground that could not have been raised before the Board, does not raise concerns of inefficient duplication of efforts or potentially inconsistent results between the Board and the district court.” *AviaGames, Inc.*, Paper 14 at 3. Further, the Director determined that, “the challenged claims have not yet been cancelled and remain in force until the opportunity to appeal has been exhausted,” noting that “[b]y the time an appeal will have concluded, Petitioner will be barred under 35 U.S.C. § 315(b) from bringing a new challenge in an IPR petition.” *Id.* at 3–4.

Fintiv states that “a district court stay of the litigation pending resolution of the PTAB trial allays concerns about inefficiency and

duplication of efforts.” *Fintiv* at 6. In view of the circumstances, we do not discern that the § 101 issues addressed in the Federal Circuit appeal would duplicate the anticipation and obviousness issues addressed here.

Accordingly, given the limited § 101 issues on appeal, we do not discern there are any concerns about duplication of efforts. Moreover, because of the uncertainty of the timing of any remand from the Federal Circuit to the district court to address any anticipation or obviousness issues, the present circumstances with a pending appeal effectively act as a stay on the assessment of invalidity issues.⁹

Thus, we determine that this factor weighs against the exercise of discretionary denial.

2. *Factor 2: proximity of the court’s trial date to the Board’s projected statutory deadline for a final written decision*

Petitioner states that this factor favors institution because “there is no trial date,” and “it is unclear if the case will ever be remanded to the District Court.” Pet. 79.

Patent Owner argues that “the Board should find that this factor weighs in favor of denial of institution” because “[t]he district court completed its consideration of the ’104 Patent and reached its final decision in September 2023, months before the Board would even institute review, much less issue a final written decision.” Prelim. Resp. 9. Patent Owner

⁹ Patent Owner argues that the panel decisions in *Snap* and *AviaGames* found that factor 1, as well as factors 2–6, favor the exercise of discretionary denial. Prelim. Resp. 8–20 (citing *Snap*, Paper 8; *AviaGames*, Paper 12). Other panels decisions are not binding, but more importantly, the earlier cases did not have the benefit of the guidance provided by the Director’s decisions in *Volvo* and *AviaGames*. *Volvo*, Paper 15; *AviaGames*, Paper 14 (remanded to the panel only on the issue of whether the challenge’s merits were compelling).

points out that, “[i]n *AviaGames*, under the same circumstances, the Board found that . . . this factor ‘weighs ***heavily*** in favor of denying institution’ because ‘the District Court has completed its consideration of the [challenged patent].’” *Id.* (quoting *AviaGames*, Paper 12 at 12–13); *see also id.* (citing *Snap*, Paper 8 at 13).

At this time, there is no district court trial date scheduled. Further, the date of any potential trial related to anticipation or obviousness challenges is uncertain if there is a remand after appeal, but it is likely that any potential trial would occur after the completion of this proceeding.

Accordingly, we determine that this factor weighs against the exercise of discretionary denial.

3. *Factor 3: investment in the parallel proceeding by the court and the parties*

If, at the time of the institution decision, the district court has issued substantive orders related to the challenged patent, such as a claim construction order, this fact weighs in favor of denial. *See Fintiv*, Paper 11 at 9–10. On the other hand, if the district court has not issued such orders, this fact weighs against discretionary denial. *Id.* at 10.

Petitioner asserts “the District Court proceedings never went to trial or even a pre-trial conference because they were concluded in response to the granting of Apple’s Motion for Judgement on the Pleadings.” Pet. 80. Petitioner asserts that, in contrast, because it “diligently worked on addressing the validity of the asserted patents” to file this Petition, based on “the amount of investment already made in this IPR proceeding, factor 3 favors institution or at worst is neutral.” *Id.* at 80.

Patent Owner contends that this factor weighs heavily in favor of denying institution because “there has been substantial investment by the

parties and the district court in the Apple Action (and the Google Action).” Prelim. Resp. 10–13. First, Patent Owner argues that “[t]he Apple Action is concluded as a result of the district court’s § 101 ruling—*i.e.*, a substantive order related to the ’104 Patent,” and “[b]ased on the same facts, the Board in *AviaGames* and *Snap* found this factor to weigh in favor of denial of institution.” *Id.* at 10 (citing Ex. 1051; *AviaGames*, Paper 12 at 13); *see also id.* (citing *Snap*, Paper 8 at 13). Second, Patent Owner argues that, “[e]ven before the district court issued its § 101 ruling, the parties and district court had already made a substantial investment in the litigation,” including the issuance of a *Markman* Order, as well as “fact and expert discovery . . . completed prior to the district court’s § 101 ruling and completed long before the Petition was filed on October 31, 2023,” the “completed discovery includ[ing] extensive written discovery, numerous depositions of fact and expert witnesses, and expert reports (including those addressing the validity of the ’104 Patent under 35 U.S.C. §§ 102 and 103).” *Id.* at 10–11. Third, Patent Owner argues that contrary to Petitioner’s assertions of diligence, Petitioner waited “until *after* the parties and the district court invested significant resources in the related litigation” to file the Petition. *Id.* at 11 (citing Pet. 80). And fourth, Patent Owner argues that prior to the Petition, “the district court and Patent Owner also made a substantial investment in the Google Action, another litigation involving the ’104 Patent,” which included “[t]he same substantive orders—a *Markman* order and § 101 ruling,” as well as “fact and expert discovery . . . completed . . . prior to the district court’s § 101 ruling in September 2023.” *Id.* at 12–13 (citing Exs. 1054, 2008, 2013) (footnote omitted).

The district court has issued substantive orders, and the parties in the district court proceedings have invested significant resources prior to the

§ 101 ruling, including the completion of claim construction and fact and expert discovery. Weighing the investment in resources and the diligence in Petitioner filing the Petition, we determine that this factor slightly favors discretionary denial.

4. Factor 4: overlap between issues raised in the petition and in the parallel proceeding

Petitioner argues that “[b]ecause any appeal of the District Court holding would be limited to § 101 issues and § 101 grounds cannot and are not raised in this IPR petition, there is no overlap of issues in this IPR proceeding and parallel litigation.” Pet. 80–82. For this reason, Petitioner contends that factor 4 favors institution. *Id.* at 81.

Patent Owner argues this factor weighs in favor of denying institution because, under similar facts “[i]n *AviaGames*, the Board determined that the fact that ‘the challenged patent ha[d] already been found to be invalid by another tribunal’ weighed in favor of exercising discretion to deny institution.” Prelim. Resp. 13–14 (quoting *AviaGames*, Paper 12 at 14). Patent Owner adds that “there is complete overlap between Petitioner’s invalidity arguments in this proceeding and its invalidity arguments in the district court” because “the two primary prior art references relied on by Petitioner for this proceeding—Bhattacharya and Spain—are also relied on by Petitioner in the Apple Action,” and “the record pertaining to these invalidity arguments has already been developed in the district court, including through hundreds of pages of expert reports.” *Id.* at 14 (citing Ex. 2014, 21; Ex. 2003, 1). According to Patent Owner, “[i]t is an inefficient use of the Board’s resources to adjudicate the validity of the ’104 Patent where the district court has already done it [and] to develop a record that has already been developed in the Apple Action.” *Id.* at 16.

In *Snap*, the Director determined that a district court's final judgment based on § 101 does not necessarily create overlap between the issues raised in a petition and a parallel district court proceeding. *Snap*, Paper 8 at 14. In view of this determination and because additional claims are challenged here that are not at issue in the district court order and Federal Circuit appeal, we determine that this factor weighs against the exercise of discretionary denial.

5. *Factor 5: whether the petitioner and the defendant in the parallel proceeding are the same party*

Petitioner here is the same as the named party in the Apple Action. Accordingly, this factor weighs in favor of exercising our discretion to deny institution.

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

Patent Owner argues that the asserted grounds are not strong and should be denied on the merits. Prelim. Resp. 16–19. Patent Owner further asserts that because the challenged patent has been found invalid in the district court, this weighs in favor of denying institution. *Id.* at 17. Petitioner, on the other hand, argues that the merits of its arguments are strong. Pet. 81–82.

As discussed above, because there is no overlap of issues between this proceeding and the district court's judgment, we do not find the court's invalidity finding to be relevant to the issue of discretionary denial. Moreover, as discussed below, we determine that the merits of the Petition meet the standard for institution.

Accordingly, we determine that this factor is neutral.

7. Conclusion

We have considered the circumstances and facts before us in view of the *Fintiv* factors. Because our analysis is fact-driven, no single factor is determinative of whether we exercise our discretion to deny institution under § 314(a). We take “a holistic view of whether efficiency and integrity of the system are best served by denying or instituting review” when evaluating these factors. *Fintiv*, Paper 11, 6. Evaluating all of the factors on this record, we determine that weight of factors 1, 2, and 4 outweighs the remaining factors. Thus, based on our assessment of the *Fintiv* factors, we decline to exercise our discretion under 35 U.S.C. § 314(a) to deny *inter partes* review.

D. Ground 1: Asserted Obviousness Based on Bhattacharya and Zeng

Petitioner asserts that claims 1, 3, 4, and 6–11 are unpatentable under 35 U.S.C. § 103 based on the combination of Bhattacharya and Zeng. Pet. 5–54. At this stage of the proceeding, Patent Owner does not dispute Petitioner’s assertions regarding this asserted ground of unpatentability. *See generally* Prelim. Resp.

1. Bhattacharya (Ex. 1005)

Bhattacharya generally relates to “[a] process and machine for estimating the location of a wireless terminal” that is “based on the observation that the signal strength of a signal from a transmitter is different at some locations” so “the location of a wireless terminal can be estimated by comparing the signal strength it currently observes against a map or database that correlates locations to signal strengths.” Ex. 1005, code (57). Figure 2, reproduced below, is an illustrative embodiment of Bhattacharya’s system. *Id.* ¶ 28.

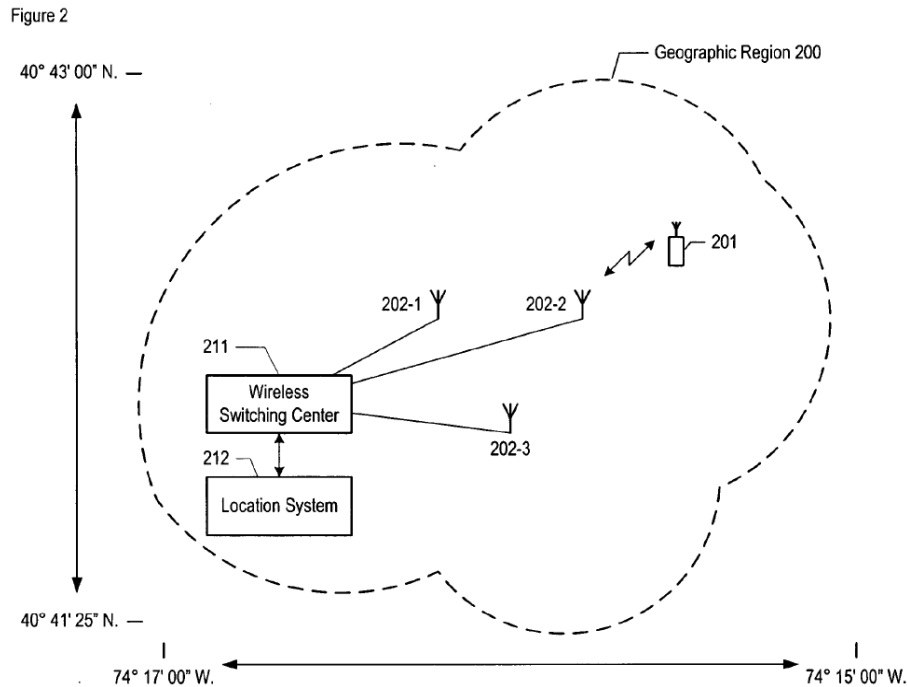


Figure 2, above, depicts a map and shows wireless switching center 211, location system 212, base stations 202-1, 202-2, and 202-3, and wireless terminal 201. Ex. 1005 ¶ 51. Location system 212 is a “data processing system that is capable of estimating the location of wireless terminal 201” that involves receiving reports that “contain the reported signal-strength measurements from wireless terminal 201 for the base stations that are on wireless terminal 201’s list of neighboring base stations.” *Id.* ¶¶ 59–60. Figure 4, reproduced below, depicts the tasks performed in estimating the location of wireless terminal 201 in geographic region 200. *Id.* ¶ 30.

Figure 4

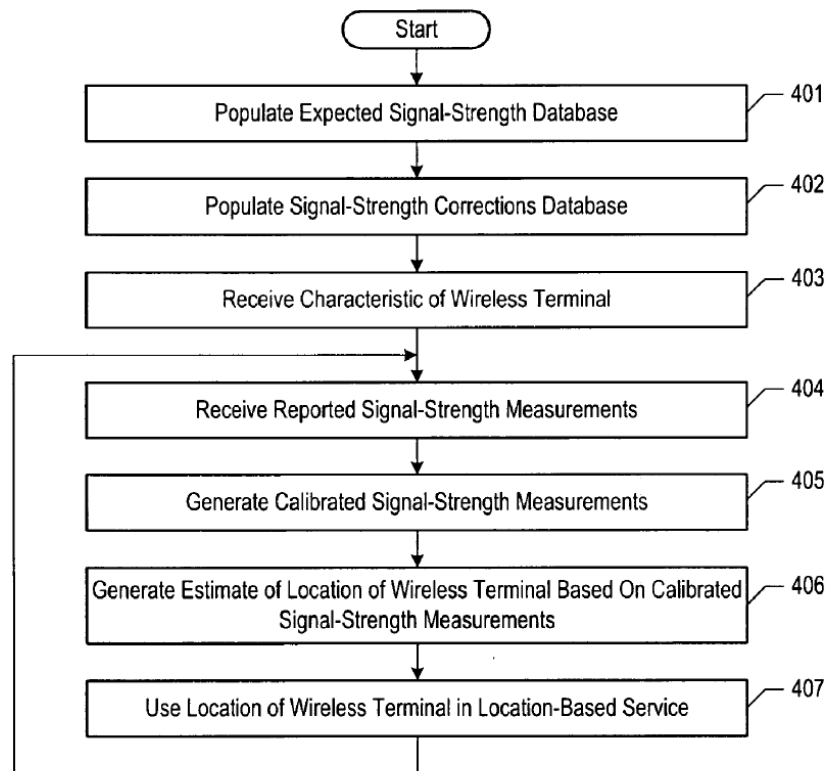


Figure 4, above, depicts the steps performed for estimating the location of wireless terminal 201 by populating an Estimated Signal-Strength Database and a Signal-Strength Database; receiving the characteristic of wireless terminal 201; receiving the reported signal-strength of wireless terminal 201; generating calibrated signal-strength characteristics based on reported signal-strength measurements and the characteristic of wireless terminal 201; generating the current estimate of the location of wireless terminal 201; and using the estimated location in a location-based service. *Id.* ¶¶ 72–84.

As a subtask of task 401 in Bhattacharya, “a rectangular grid of X by Y tessellated squares is overlaid onto geographic region 200” as shown in Figure 6, reproduced below. Ex. 1005 ¶ 105–106.

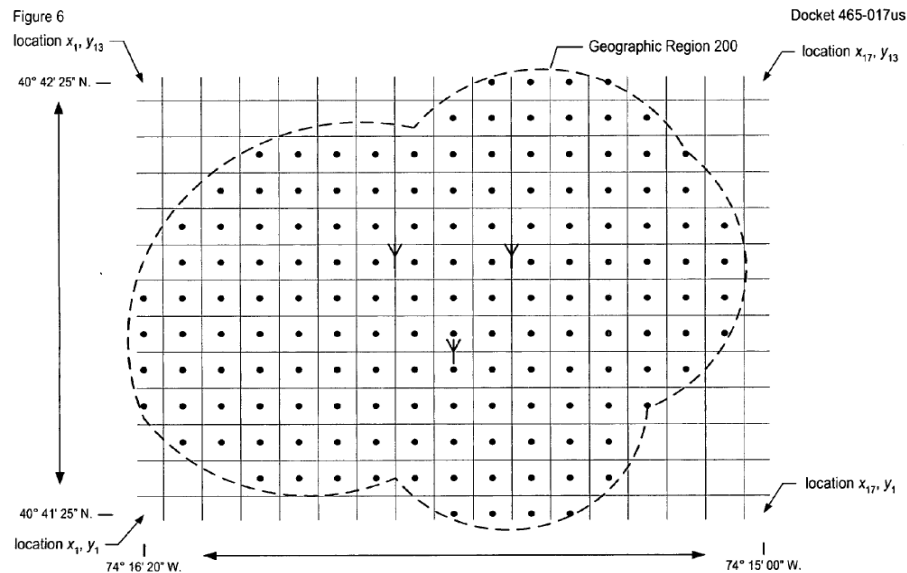


Figure 6, above, depicts a map of how geographic region 200 is partitioned. Ex. 1005 ¶ 30. As depicted in Figure 6, “the center of each square represents a location.” *Id.* ¶ 106. In the system, “expected signal-strength functions $E(1,x,y,t)$, $E(2,x,y,t)$, $E(3,x,y,t)$ ” are generated based on a combination of theoretical radio-frequency propagation models and empirical signal-strength measurements. *Id.* ¶¶ 112–117. Expected signal strength generally decreases as a function of the distance from the transmitter, however, “the topography of [a] region and the presence of buildings, trees, and other radio-frequency obstacles severely alters” the signal strength and “with time as the atmospheric and meteorological conditions change” so expected signal-strength functions is also a function of time. *Id.* ¶¶ 113–114.

2. Zeng (*Exhibit 1006*)

Zeng generally relates to handoff from one cell to another in a wireless cellular communication system to achieve continuous service. Ex. 1006, 1. Zeng describes a “handoff” as “the process of changing the channel (frequency, time slot, spreading code, or combination of them)

associated with the current connection while a call is in progress.” *Id.* Zeng identifies two categories of handoff: hard handoffs in which “current resources are released before new resources are used,” and soft handoffs in which “both existing and new resources are used during the handoff process.” *Id.* In hard handoffs (also referred to as “break before make” connections), the base station hands off the mobile station’s call to the base station of another cell and then drops the call “[u]nder the control of the MSC.”¹⁰ *Id.* at 2.

Zeng further describes various handoff initiation techniques, including the “Relative Signal Strength” technique in which the strongest base station is selected at all times. Ex. 1006, 2. In the “Relative Signal Strength with Threshold” technique, handoff is allowed “only if the current signal is sufficiently weak (less than [a] threshold) and the other is the stronger of the two.” *Id.* In this technique, “[t]he effect of the threshold depends on its relative value as compared to the signal strengths of the two [base stations] at the point at which they are equal.” *Id.*

3. *Independent Claim 1*

Petitioner contends that the proposed combination of Bhattacharya and Zeng discloses the limitations of claim 1. Pet. 29–50. To support its arguments, Petitioner identifies certain passages in the cited references and explains the significance of each passage with respect to the corresponding claim limitation. *Id.* For instance, regarding the limitation “providing a database of previously-gathered calibration data for a predetermined region in a wireless network,” Petitioner argues that Bhattacharya discloses an

¹⁰ According to Petitioner and Dr. Sundaresan, one of ordinary skill in the art would have understood that, in Zeng, “MSC” refers to a “mobile switching center.” Pet. 21–22; Ex. 1003 ¶ 59.

expected signal-strength database with data representing expected values that corresponds to the claimed “a database of previously-gathered calibration data.” Pet. 31–37 (citing Ex. 1005, ¶¶ 39, 51, 61, 63–68, 72, 85–87, 89–101, 119, 179, Figs. 3, 4, 17; Ex. 1003 ¶¶ 79–87; Ex. 1001, 1:27–38, 3:61–4:6; Ex. 1011, 7:28–44, 7:50–56). Petitioner also articulates reasons to combine, with a reasonable expectation of success, the relied-upon aspects of Bhattacharya and Zeng. *Id.* at 24–29.

Patent Owner does not offer any arguments specifically addressing the limitations of claim 1; nor does Patent Owner dispute Petitioner’s rationale for combining the references at this stage of the proceeding. *See generally* Prelim. Resp. Also, as discussed above, Patent Owner has not appealed the district court’s ruling that claim 1 is patent ineligible under 35 U.S.C. § 101, and we have requested that the parties address whether or not it is appropriate for the Board to reach a final written decision as to claim 1.. *See* Prelim. Resp. 2; Ex. 2015; *supra*, 5 n.1.

Based on our review and consideration of the current record, we determine that the information presented sufficiently supports, for purposes of institution, Petitioner’s assertions that the combination of Bhattacharya and Zeng satisfies each limitation of claim 1. *See* Pet. 29–50. We therefore determine Petitioner has met its burden to show a reasonable likelihood it would prevail in demonstrating that claim 1 is unpatentable over the combination of Bhattacharya and Zeng.

4. Dependent Claims 3, 4, and 6–11

Claims 3, 4, and 6–11 depend, directly or indirectly, from claim 1. Ex. 1001, 12:19–26, 12:30–47. Because Petitioner has demonstrated a reasonable likelihood of success in proving that at least one claim of the ’104 patent is unpatentable, we institute on all grounds and all claims

raised in the Petition. *See SAS Inst., Inc. v. Iancu*, 138 S. Ct. 1348, 1359–60 (2018); *see also PGS Geophysical AS v. Iancu*, 891 F.3d 1354, 1360 (Fed. Cir. 2018) (interpreting 35 U.S.C. § 314 to require “a simple yes-or-no institution choice respecting a petition, embracing all challenges included in the petition”); 37 C.F.R. § 42.108(a) (“When 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.”). Therefore, it is not necessary for us to assess every claim challenged by Petitioner.

Nevertheless, we note that Petitioner provides reasonable and detailed explanations, supported with the testimony of Dr. Sundaresan, indicating where the combination of Bhattacharya and Zeng discloses the limitations of claims 3, 4, and 6–11. Pet. 50–54 (citing Ex. 1003 ¶¶ 105–112; Ex. 1005 ¶¶ 2, 3, 9–10, 55, 57–60, 63, 85–94, 115, 158–160, 179–189, Fig. 2). We have reviewed Petitioner’s contentions with respect to these claims and determine that the information presented in the Petition establishes that there is a reasonable likelihood that Petitioner would prevail in its assertion that claims 3, 4, and 6–11 are unpatentable over the combination of Bhattacharya and Zeng.

E. Ground 2: Asserted Obviousness Based on Bhattacharya, Zeng, and Spain

Petitioner challenges claims 1–4 and 6–11 as unpatentable under 35 U.S.C. § 103 based on the combination of Bhattacharya, Zeng, and Spain.

Pet. 54–75. Patent Owner provides arguments addressing this asserted ground of unpatentability.¹¹ Prelim. Resp. 33–42.

1. Spain (Ex. 1007)

Spain generally relates to “a technique for estimating the location of a wireless terminal and using the estimate of the location in a location-based application.” Ex. 1007, code (54), ¶ 1. Spain’s wireless telecommunications system 200 includes wireless terminal 201, base stations 202-1, 202-2, and 202-3, wireless switching center 211, and location server 214, to provides wireless telecommunications service to geographic region 220. *Id.* ¶ 41.

“Location server 214 comprises: processor 301, memory 302, and local-area network transceiver 303,” wherein processor 301 executes operating system 311 and application software 312, and populates, amends, uses, and manages Location-Trait Database 313 and Trait-Correction Database 314. *Id.* ¶¶ 57–58. An exemplary operation of Spain’s technique is depicted in Figure 4, reproduced below.

¹¹ Patent Owner’s Preliminary Response presents patentability arguments only for dependent claim 2. Prelim. Resp. 33–42. Patent Owner explains that “[t]wo district court litigations involving the ’104 Patent have already resulted in final judgments . . . that the asserted claims are unpatentable pursuant to 35 U.S.C. § 101,” and “Patent Owner has only appealed the district court’s § 101 ruling as to dependent claim 2.” *Id.* at 1–2; *see also id.* at 17 (arguing the asserted references fail to teach the subject matter of claim 2), 33 n.6 (noting that the Preliminary Response discusses the merits with respect to claim 2 only).

Figure 4

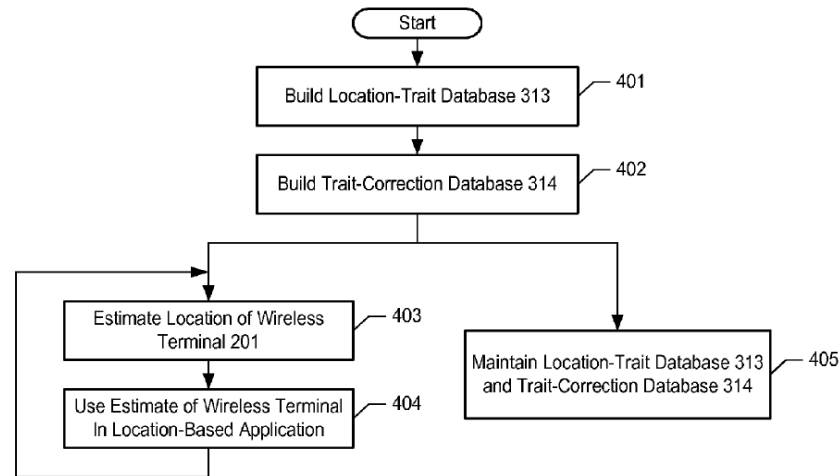


Figure 4 depicts a flowchart of the processes performed in accordance with an illustrative embodiment. *Id.* ¶ 18. At process 401, Location-Trait Database 313 is built, wherein the “Location-Trait Database” is defined as “a database that maps each of a plurality of locations to one or more expected traits associated with a wireless terminal at that location.” *Id.* ¶ 66. To build Location-Trait Database 313, geographic region 220 is partitioned into B(T,N) locations. *Id.* ¶ 72. Each location is described by various traits, including “a unique identifier,” “the coordinates (e.g., latitude, longitude, altitude, etc.) that define its scope (e.g., position, area, volume, etc.),” and “the identities of its adjacent locations.” *Id.* ¶¶ 76–82. Spain explains that geographic region 220 may be partitioned “into any number of locations of any size and shape.” *Id.* ¶ 99.

2. Independent Claim 1

Petitioner contends that the proposed combination of Bhattacharya, Zeng, and Spain discloses the limitations of claim 1. Pet. 62–68. To support its arguments, Petitioner identifies certain passages in the cited references and explains the significance of each passage with respect to the

corresponding claim limitation. *Id.* Petitioner also articulates reasons to combine, with a reasonable expectation of success, the relied-upon aspects of Bhattacharya, Zeng, and Spain. *Id.* at 56–62. Patent Owner does not offer any arguments specifically addressing the limitations of claim 1; nor does Patent Owner dispute Petitioner’s rationale for combining the references at this stage of the proceeding. *See generally* Prelim. Resp.

Based on our review and consideration of the current record, we determine that the information presented sufficiently supports, for purposes of institution, Petitioner’s assertions that the combination of Bhattacharya, Zeng, and Spain satisfies each limitation of claim 1. *See* Pet. 56–68. We therefore determine Petitioner has met its burden to show a reasonable likelihood it would prevail in demonstrating that claim 1 would have been obvious over the combination of Bhattacharya, Zeng, and Spain.

3. *Dependent Claim 2*

Claim 2 depends from claim 1 and further recites that the database of claim 1 “comprises previously-gathered calibration data for one or more non-uniform grid points within said region.” Ex. 1001, 12:16–18. As discussed above, we adopt the proposed construction of “grid point” as “a point associated with representative calibration data for an area.” *See supra* § III.B. Regarding the recitation of *non-uniform* grid points, Petitioner argues that in the ’104 patent specification, “non-uniform grid point” can “represent the signal characteristics and/or calibration data over a given region.” Pet. 68 (quoting Ex. 1001, 3:50–60). Patent Owner contends that U.S. Patent No. 8,406,753 (Ex. 2016, “the ’753 patent”)¹² “explains that

¹² The ’753 patent claims the benefit of the same provisional application as the ’104 patent. Ex. 2016, code (60).

‘[non-uniform] grid points do not necessarily have to be part of a uniform grid and usually will not be uniformly distributed throughout the geographic region.’” Prelim. Resp. 34 (quoting Ex. 2016, 2:43–50).

The ’104 patent states that “[i]n general, a non-uniform grid point (NUG) may represent the signal characteristics and/or calibration data over a given region,” and “NUGs represent an area of collected calibration data.”¹³ Ex. 1001, 3:50–60. The ’104 patent, however, does not explain clearly how a “non-uniform grid point” differs from a generic “grid point,” i.e., “a point associated with representative calibration data for an area.”

Under these circumstances, we agree that it is helpful to consider the related ’753 patent in construing “non-uniform grid points.” In addition to the above language quoted by Patent Owner, the ’753 patent describes non-uniform grid points as “grid points [that] may be non-uniformly spaced throughout the geographic region.” Ex. 2016, 9:41–42. Accordingly, for purposes of this Decision, we determine that “non-uniform grid points” are “grid points that are non-uniformly spaced throughout a geographic region.”

Petitioner argues that claim 2 would have been obvious in view of Spain’s disclosure of techniques for partitioning a geographic region. Pet. 68 (citing Ex. 1003 ¶ 139). In particular, Petitioner argues that Spain teaches “populating, amending, using, and managing Location-Trait Database 313” which is “a database that maps each of a plurality of locations to one or more expected traits associated with a wireless terminal at that location.” *Id.* (quoting Ex. 1007 ¶¶ 58, 66). Petitioner reproduces Spain’s Figures 6A and 6E which depict geographic region 220. *Id.* at 69–70 (citing

¹³ The ’104 patent also indicates that a set of three NUGs is illustrated in Figure 1 (Ex. 1001, 3:52–54), but neither Figure 1 nor any other figure of the ’104 patent depicts any such NUGs.

Ex. 1007 ¶ 98, Fig. 6A, 6E; Ex. 1003 ¶¶ 140–141). According to Petitioner, Spain teaches that “each location is described with various information, e.g., ‘unique identifier’ and ‘coordinates’ that ‘define its scope (e.g., position, area, volume, etc.)].” *Id.* at 70 (citing Ex. 1007 ¶¶ 76–82). Petitioner argues that the locations 20, 25, and 26 of Figure 6E have different shapes and sizes and represent different areas. *Id.* at 70–71. Thus, in Petitioner’s view, the locations represent “one or more non-uniform grid points within said region.” *Id.* at 71 (citing Ex. 1003 ¶ 142).

Petitioner further argues that a person having ordinary skill in the art would have found it obvious to implement the Bhattacharya-Zeng-Spain database by populating the database with data representing signal-strength measurements collected at a pre-processing or prior measurement step, which corresponds to “previously-gathered calibration data.” Pet. 71 (Ex. 1003 ¶ 143; Ex. 1005 ¶¶ 85–90, 115; Ex. 1007 ¶¶ 6, 70). Petitioner also argues that the database combines data from expected values at each location to reach “one or more predetermined calibration points.” *Id.* (Ex. 1003 ¶ 143).

Patent Owner argues that the combination of Bhattacharya, Zeng, and Spain does not render claim 2 obvious. Prelim. Resp. 33–42. In particular, Patent Owner argues “the district court concluded that ‘grid point,’ as used in the ’104 Patent, specifically refers to ‘a point associated with representative calibration data for an area’ that is ***generated based on analysis of calibration data.***” Prelim. Resp. 34 (quoting Ex. 2012, 20; citing Ex. 2012, 19). Patent Owner then contends that “Petitioner points to Spain’s disclosure of ‘partitioning a geographic [region]’ as purportedly teaching [non-uniform grid points],” but “[t]he partitioned locations of Spain are fundamentally different from the non-uniform grid points of the ’104

Patent because they are not based on analysis of calibration data.” *Id.* at 36 (citing Pet. 68–71). Instead, Patent Owner contends that Spain discloses that the partitioned locations are determined independently of any measured calibration data for several reasons. *Id.*

First, Patent Owner argues that “Spain states the partitioning is based on ‘natural and man-made physical attributes of geographic region 220,’ ‘legal laws governing geographic region 220,’ ‘data regarding the location and movement of individuals . . . and vehicles in geographic region 220,’ and other similar factors.” Pet. 36–37 (citing Ex. 1007 ¶¶ 86–93) (alteration in original). Patent Owner adds that Spain teaches using “the operator’s desired accuracy level and tolerance level for computational complexity” to partition a region into locations. *Id.* at 37 (citing Ex. 1007 ¶¶ 94–97).

According to Patent Owner, however, none of these factors are calibration data. *Id.* Second, Patent Owner argues that Figures 6a–6k of Spain demonstrate that the partitioning is not based on calibration data. *Id.* at 38–40. More specifically, Patent Owner asserts that by comparing Figures 6a and 6b to Figures 6c–6e, “Spain’s partitioning is shown and described as merely assigning location identifiers to different physical attributes or characteristics of a region (*e.g.*, streets), amounting to no more than an overlay of identifiers onto a region,” and “[t]here is no analysis of calibration data that occurs to assign these identifiers.” *Id.* at 39–40 (citing Ex. 1007 ¶¶ 98–99, Figs. 6a–6e). Third, Patent Owner argues that “the flowchart in Figure 5 of Spain confirms that the partitioning is not based on analysis of calibration data, and thus the partitioned locations are not non-uniform grid points,” because the figure shows “the partitioning of a geographic region into different locations occurs *before* location-specific

‘traits’ are ascertained for each location.” *Id.* at 40–41 (citing Ex. 1007 ¶¶ 19, 73, 102–119, Fig. 5).

Although Patent Owner states that it does not dispute Petitioner’s statement on claim construction for the purposes of the Preliminary Response (Prelim. Resp. 32), Patent Owner’s argument relies on an altered claim construction of “grid point.” In support of its position that “grid points” must be generated based on analysis of calibration data (in addition to being “a point associated with representative calibration data for an area”), Patent Owner argues that

the district court stated that the ’753 Patent’s explanation that calibration data from a number of locations is “gathered and analyzed so that particular grid points within the geographic region can be determined and associated with a particular set or sets of calibration data” demonstrates “what *must be done* to arrive at a grid point or set of grid points.”

Prelim. Resp. 22–23 (citing Ex. 2012, 19). Thus, according to Patent Owner, “the district court acknowledged that the claimed grid points must be generated based on the measured calibration data—they do not exist until generated by the claimed invention.” *Id.* at 23.

Patent Owner mischaracterizes the district court’s claim construction order. Instead of concluding that a “grid point” must be generated based on analysis of calibration data, the district court was explaining why it declined to adopt Patent Owner’s¹⁴ proposed construction. Ex. 2012, 19. That is, after noting that Patent Owner cited language from the Abstract of the ’753 patent in support of its proposed claim construction, the district court stated: “But the [cited] language . . . is directed more toward what *must be done* to arrive at a grid point or set of grid points rather than what a grid point *is*.”

¹⁴ Patent Owner is the plaintiff in the Apple Action.

Id. The district court was explaining why the cited language was not pertinent to the meaning of “grid point”; it was not indicating that grid points must be generated based on the measured calibration data.

The district court determined that the claim term “grid point” should be construed as “a point associated with representative calibration data for an area.” Ex. 2012, 20. Patent Owner’s argument attempts to introduce additional requirements that are not part of the claim construction. For these reasons, we do not find Patent Owner’s argument on this point persuasive.

Next, Patent Owner argues that “Petitioner fails to show how Spain satisfies the district court’s construction of ‘grid point’ requiring it to be associated with ‘representative calibration data for an area.’” Prelim. Resp. 41. Patent Owner states that “Petitioner does not even attempt to address the ‘representative calibration data’ part of the ‘grid point’ construction.” *Id.* Patent Owner further argues that

the district court—which adopted the construction that Petitioner proposed here—explained that “representative calibration data” in the construction reflects that “the defining characteristic of a NUG region . . . is that the data points within an area are all ‘statistically very similar’ such that each of the grid points within the NUG region can represent the overall NUG.”

Id. at 42 (quoting Ex. 2012, 20) (alteration in original).

Patent Owner’s argument does not persuasively undermine Petitioner’s showing. Petitioner explained that a “non-uniform grid point,” according to the ’104 patent specification, can “represent the signal characteristics and/or calibration data over a given region.” Pet. 68 (quoting Ex. 1001, 3:50–60). Petitioner explained how Bhattacharya-Zeng-Spain renders this feature obvious as explained above. *Id.* at 68–71. Moreover, Petitioner explained, for example, how Bhattacharya teaches storing data

“*representing* expected values later used for location estimation within geographic region 200.” Pet. 33 (emphasis added). Patent Owner does not persuasively dispute Petitioner’s explanation of Bhattacharya in this regard, and Patent Owner does not persuasively address why Petitioner’s overall explanation is incorrect or inadequate.

Also, although the district court provided an explanation of why the term “representative calibration data” is appropriate for inclusion in the construction of grid point, the district court did not include its explanation of representative calibration data as an explicit part of the “grid point” construction. Ex. 2012, 20.

Based on our review and consideration of the current record, we determine Petitioner has met its burden to show a reasonable likelihood it would prevail in demonstrating that claim 2 is unpatentable over the combination of Bhattacharya, Zeng, and Spain.

4. Dependent Claims 3, 4, and 6–11

Claims 3, 4, and 6–11 depend, directly or indirectly, from claim 1. Ex. 1001, 12:19–26, 12:30–47. Because Petitioner has demonstrated a reasonable likelihood of success in proving that at least one claim of the ’104 patent is unpatentable, we institute on all grounds and all claims raised in the Petition. *See SAS*, 138 S. Ct. at 1359–60; *PGS Geophysical*, 891 F.3d at 1360; 37 C.F.R. § 42.108(a). Therefore, it is not necessary for us to assess every claim challenged by Petitioner.

Nevertheless, we note that Petitioner provides reasonable and detailed explanations, supported with the testimony of Dr. Sundaresan, indicating where the combination of Bhattacharya, Zeng, and Spain discloses the limitations of claims 3, 4, and 6–11. Pet. 71–75. We have reviewed Petitioner’s contentions with respect to these claims and determine that the

information presented in the Petition establishes that there is a reasonable likelihood that Petitioner would prevail in its assertion that claims 3, 4, and 6–11 are unpatentable over the combination of Bhattacharya, Zeng, and Spain.

IV. CONCLUSION

After considering the evidence and arguments presented in the Petition and Preliminary Response, we determine that Petitioner has demonstrated a reasonable likelihood of prevailing with respect to at least one of the challenged claims. Thus, we institute an *inter partes* review of all challenged claims on all presented challenges. *SAS*, 138 S. Ct. at 1359–60; *PGS Geophysical*, 891 F.3d at 1360; 37 C.F.R. § 42.108(a).

V. ORDER

In consideration of the foregoing, it is hereby:

ORDERED that, pursuant to 35 U.S.C. § 314(a), an *inter partes* review is instituted for claims 1–4 and 6–11 of the ’104 patent on the unpatentability grounds asserted in the Petition; and

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

IPR2024-00255
Patent 7,561,104 B2

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