

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

NOKIA OF AMERICA CORPORATION *et al.*,
Petitioners,

v.

IARNACH TECHNOLOGIES LIMITED,
Patent Owner.

Case IPR2024-00900
Patent 8,934,359

**PATENT OWNER'S PRELIMINARY RESPONSE UNDER 37
C.F.R. § 42.107 TO PETITION FOR *INTER PARTES* REVIEW**

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EXHIBIT LIST

Exhibit	Description
2001	Declaration of Bruce Schofield in Support of Patent Owner's Preliminary Response
2002	Defendant's Invalidity Contentions, <i>Iarnach Technologies Ltd. v. AT&T Services Inc. et al.</i> , Case No. 2:23-cv-00231 (E.D. Tex.) (served Dec. 7, 2023)
2003	Defendant's Invalidity Contentions, <i>Iarnach Technologies Ltd. v. Verizon Business Network Services LLC et al.</i> , Case No. 2:23-cv-00631 (E.D. Tex.) (served May 6, 2024)
2004	Executed Summons for AT&T Services Inc., <i>Iarnach Technologies Ltd. v. AT&T Services Inc. et al.</i> , Case No. 2:23-cv-00231, Dkt. No. 11 (E.D. Tex.)
2005	Federal Court Management Statistics–Profiles, available at https://www.uscourts.gov/sites/default/files/data_tables/fcms_na_distprofile0630.2024.pdf

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I. Introduction

Patent Owner Iarnach Technologies Limited (“Iarnach” or “Patent Owner”) respectfully requests that the Board refuse to institute *inter partes* review of U.S. Patent No. 8,934,359 (the “’359 Patent”) because Petitioners Nokia of America Corporation (“Nokia”) and AT&T Services, Inc. (“AT&T”) (collectively “Petitioners”) have not shown a reasonable likelihood of prevailing on any of their challenges to Claims 1-11 of the ’359 Patent (the “Challenged Claims”).

First, Petitioners have failed to map anything to the “parameter set” claim limitations found in every Challenged Claim. Instead, Petitioners treated “parameters” and “parameter sets” as interchangeable despite (1) the specification distinguishing one from the other, and (2) the fact that the Challenged Claims recite both “parameters” and “parameter sets,” further reinforcing the distinction. This alone is sufficient reason to deny institution of the Petition.

Second, the Board should exercise its discretion to deny the Petition under *Fintiv*. Despite asserting the same invalidity grounds in a district court case on December 7, 2023, Petitioners delayed the filing of their IPR Petition by more than **five months**, ultimately filing on the last possible day allowed under statute. *See* Pet. at 87 (showing a May 30, 2024 filing date); EX2002 at 57-58, 564. Petitioners’ unexplained delay makes it highly likely that this proceeding (if instituted) would finish well after the trial in the parallel district court proceeding, which is set for

March 17, 2025. EX1022 at 1. This is further compounded by the fact that there is a second district court proceeding against different defendants involving the same claims and invalidity grounds that is also projected to complete prior to this proceeding. *See* EX1025 at 1. Thus, Petitioners' lack of diligence renders any challenge in this IPR duplicative and an inefficient use of the Board's resources.

For at least these reasons, the Petition should be denied.

II. Background

The '359 Patent relates to improvements in passive optical network ("PON") systems. EX1001 at 1:7-12; EX2001 ¶¶30-33. A passive optical network generally includes an "optical line terminal" ("OLT") connected to one or more "optical network unit(s)" ("ONU"). Upstream communication from the ONUs to the OLT occurs in bursts, where each ONU is allocated a separate time slot in which to communicate with the OLT. *See* EX1001 at 1:16-24. To facilitate these burst communications in conventional PONs it was necessary for the OLT and an ONU to be pre-configured on the burst overhead parameters to be used. *See id.* at 1:16-40. Upstream burst overhead parameters can include (for example) whether Forward Error Correction is used, a delimiter based on link quality, a preamble related to link quality and performance, or the size of the guard band. *Id.* at 1:23-32.

Prior to the '359 Patent, burst overhead parameters would be determined during a "register process," where the OLT would broadcast to the ONUs the

individual parameters required by the OLT. *Id.* at 1:33-40. The inventors of the '359 Patent identified several drawbacks to that approach which rendered it inefficient and inflexible, as discussed below. *See* EX2001 ¶¶34-36.

First, in a conventional PON prior to the '359 Patent, the value for each individual burst overhead parameter was selected and indicated separately, which created unnecessary complexity. EX1001 at 1:65-67. Rather than using a separate indicator for every possible parameter value and permutation of parameters, the '359 Patent inventors proposed the concept of a "parameter set." For example, the '359 Patent explains that the OLT can determine and identify "overhead parameter sets according to the link quality." *Id.* at 8:54-56. It gives an example of using parameter sets 0b00 (indicating "typical link quality"), 0b01 (indicating "worse than the typical link quality"), and 0b10 (indicating "better than the typical link quality"). *Id.* at 8:57-67. Each of these parameters set identifiers can then be associated with an entire "set" of parameters appropriate to that link quality (*e.g.*, if the ONU receives an indication of parameter set "0b01," then it would know to use the delimiter, preamble, and guard band settings appropriate for "worse than the typical link quality"). This new approach taught by the '359 Patent reduces complexity and improves flexibility in the selection and use of upstream burst overhead parameters. *See id.* at 1:64-67, 21:41-45.

Second, in a conventional PON prior to the '359 Patent, after the ONU received upstream burst overhead parameters during the “register process,” those parameters could not be updated to new values during normal operation. *Id.* at 1:25-40, 2:1-11; EX1002 at 34 (prosecution history Notice of Allowance noting that in the prior art “uplink parameters stay the same as long as the optical network is operational”). However, link transmission quality is not static, and when quality improved or degraded after the initial “register process” the OLT and ONU were forced to continue using the original upstream burst overhead parameters, resulting in less effective use of available bandwidth. *Id.* at 2:1-11. To counter this problem, the '359 Patent inventors created solutions to (1) detect changes in transmission quality and update the burst overhead parameters accordingly, and (2) switch between the use of the old burst overhead parameters and the new parameters. *See, e.g., id.* at 7:26-8:52 (addressing various permutations of the OLT and ONU detecting quality information and determining parameters).

By utilizing parameter sets, determining link quality in an ongoing manner, adjusting parameters accordingly, and coordinating switching to these new parameters, the '359 Patent teaches how to improve flexibility and efficiency and make better use of available bandwidth in the PON even in changing conditions. *See id.* at 1:65-2:11, 21:41-45. During prosecution the examiner recognized in the notice of allowance that in the prior art “uplink parameters stay the same as long as the

optical network is operational” and that the ’359 Patent taught “setting up multiple sets of parameters to use in the uplink burst cycle in order to better use bandwidth based on the quality of the transmission channel.” EX1002 at 34.

Independent Claim 1 (the only independent claim at issue) is reproduced below.¹

[1.PRE] A method for managing upstream burst overhead parameters, comprising:

[1.A] an optical line terminal or an optical network unit detecting transmission quality of a downlink between the optical line terminal and the optical network unit;

[1.B] the optical line terminal or the optical network unit determining the upstream burst overhead parameters suitable for the optical network unit according to the transmission quality; and

[1.C] the optical network unit starting to use the upstream burst overhead parameters suitable for the optical network unit after switching time determined by the optical network unit itself or indicated by the optical line terminal;

[1.D] wherein, before the step of the optical line terminal or the optical network unit detecting the transmission quality of the downlink between the optical line terminal and the optical network unit, the method further comprises:

¹ For consistency, Patent Owner has adopted the same claim limitation labels as Petitioners.

[1.E] the optical line terminal determining and identifying N kinds of upstream burst overhead parameter sets according to different levels of link quality, wherein N is an integer and is larger than zero; and

[1.F] the optical line terminal sending a parameter value or an identification of one default upstream burst overhead parameter set to the optical network unit; and the optical network unit receiving the parameter value or the identification of the upstream burst overhead parameter set in a waiting state and using the upstream burst overhead parameter set; or,

[1.G] the optical line terminal sending parameter values or identifications of more than one upstream burst overhead parameter set to the optical network unit; and the optical network unit receiving the parameter values or the identifications of the upstream burst overhead parameter sets in a waiting state and using one of the received upstream burst overhead parameter sets.

III. The Asserted References

Petitioners' sole asserted invalidity ground is that "Claims 1-11 are unpatentable under pre-AIA 35 U.S.C. §103(a) over G.984.3 in view of Khhermosh" (the "Asserted Ground"). Pet. at 1.

A. G.984.3 [EX1005]

G.984.3 is titled "Gigabit-capable Passive Optical Networks (G-PON): Transmission convergence layer specification." EX1005 at Cover. It "describes the transmission convergence layer for gigabit-capable passive optical networks."

EX1005 at i. The document identifies types of upstream overhead parameters that might be used in a PON, as well as how those parameters can be set individually during initialization. *See* EX1005 at 101, 109-110; EX2001 ¶¶39-40. However, the document does not address detecting transmission quality and switching those parameters as conditions change, nor does it address the concept of parameters sets associated with multiple parameters.

G-PON references including G.984.3 were previously considered by the examiner during prosecution, and are discussed in the '359 patent Specification.² *See* EX1001 at References Cited (listing G.984.3), 1:33-50 (identifying shortcomings in G.984.3); EX1002 at 34 (identifying the reasons the invention was allowed over G-PON standard references).

² G.984.3 was considered by the examiner during prosecution and appears on the face of the '359 Patent. EX1001 at References Cited (listing G.984.3); EX1002 at 54. The examiner referred to G.984.2 in the Notice of Allowance, which may have been a typographical error (as Petitioners note, G.984.2 does not appear on the face of the patent). EX1002 at 34; Pet. at 78 n.12. For purposes of this Preliminary Response, it is not necessary to resolve whether this was a typographical error or whether the examiner was addressing additional G-PON standard references beyond G.984.3.

B. Khhermosh [EX1014]

Khhermosh is U.S. Patent App. Pub. No. 2008/0260378 titled “Method of Ethernet Frame Forward Error Correction Initialization and Auto-Negotiation.” EX1014 Cover. Khhermosh describes “[a] method of managing forward error correction (FEC) initialization and auto-negotiation in ethernet passive optical networks.” *Id.* at Abstract. Consistent with that description, Khhermosh focuses solely on how to initialize a single parameter (FEC). EX2001 ¶¶41-42. It does not teach anything in relation to parameter sets.

IV. Legal Standards

An IPR should not be instituted unless the Petitioner has shown a likelihood of success on the invalidity grounds *presented in the petition*. See *In re Magnum Oil Tools Int’l, Ltd.*, 829 F.3d 1364, 1381 (Fed. Cir. 2016) (“[T]he Board must base its decision on arguments that were advanced by a party, and to which the opposing party was given a chance to respond.”).

“In an IPR, the petitioner has the burden from the onset to show with particularity why the patent it challenges is unpatentable.” *Harmonic Inc. v. Avid Tech., Inc.*, 815 F.3d 1356, 1363 (Fed. Cir. 2016) (citing 35 U.S.C. § 312(a)(3)). This burden of persuasion never shifts to the patent owner. See *Dynamic Drinkware, LLC v. Nat’l Graphics, Inc.*, 800 F.3d 1375, 1378 (Fed. Cir. 2015).

“To satisfy its burden of proving obviousness, a petitioner cannot employ mere conclusory statements. The petitioner must instead articulate specific reasoning, based on evidence of record, to support the legal conclusion of obviousness.” *In re Magnum Oil Tools Int’l*, 829 F.3d at 1380-81. Where the petition fails to meet this burden, the Board is not “free to adopt arguments on behalf of petitioners that could have been, but were not, raised by the petitioner.” *Id.* (noting that while “[i]t is true that the entire IPR process is one designed as an ‘efficient system for challenging patents that should not have issued,’” “it is still a system that is predicated on a petition followed by a trial in which the petitioner bears the burden of proof.”)

V. Level of Ordinary Skill in the Art

As explained by Patent Owner’s expert, a POSITA at the time of the inventions would have at least a bachelor’s degree in electrical engineering, computer science, or a similar degree plus at least two years of experience in optical networks. EX2001 ¶29. This description is approximate, and a higher level of education or skill might make up for less experience, and vice versa.

VI. Claim Construction

Claims are construed according to *Phillips v. AWH Corp.*, 415 F.3d 1303 (Fed. Cir. 2005) (en banc). See 37 C.F.R. § 42.100 (b).

Petitioners state that “[t]he terms should receive their respective plain and ordinary meaning as understood by a person of ordinary skill in the art.” Pet. at 8. For purposes of this Preliminary Response, Patent Owner does not propose any constructions because the Petition fails to present a reasonable likelihood of prevailing under any reasonable construction of the claim limitations addressed.³

VII. Argument

The Petition should be denied for two reasons:⁴

(A) Petitioners have failed to map anything to the “parameter set” claim limitations found in every Challenged Claim.

(B) The Board should exercise its discretion to deny the Petition under *Fintiv* because Petitioners delayed the filing of their IPR Petition by more than **five months** after identifying the same invalidity grounds in the parallel district court proceeding, making it highly likely that this proceeding (if instituted) would finish well after the trial in the parallel district court proceeding.

³ Patent Owner may propose its own constructions if the Petition is instituted.

⁴ For the purposes of this Preliminary Response, Patent Owner addresses only certain deficiencies in the challenge to Claim 1 (the only independent Challenged Claim). If the Petition is instituted, then Patent Owner will present additional arguments addressing further deficiencies in all Challenged Claims.

A. Petitioners Failed to Address the Claimed “Parameter Sets”

The Petition cannot present a reasonable likelihood of prevailing on the sole Asserted Ground because it never directly addresses the claimed “parameter sets,” much less identifies anything in the prior art which could teach or render obvious the “parameter sets.”

As discussed above in Section II, the ’359 Patent teaches the use of parameter sets associated with multiple parameters, such that indication of a parameter set (such as a set associated with better than typical link quality) can be used to identify the parameters and parameter values appropriate to that parameter set (such as delimiter, preamble, and guard band settings appropriate to an ONU with better than typical link quality).

The ’359 Patent teaches the use of parameter sets rather than just individual parameters to reduce complexity and improve bandwidth utilization, and all Challenged Claims recite the use of “parameter sets.” *See, e.g.*, EX1001 at 1:64-67, 8:53-9:6, 18:15-19, Claim 1 at 21:64-66 (“the optical line terminal determining and identifying N kinds of upstream burst overhead **parameter sets** according to different levels of link quality, wherein N is an integer and is larger than zero.” (emphasis added)); EX2001 ¶¶43-53. During prosecution, the examiner identified “setting up multiple **sets** of parameters to use in the uplink burst cycle” as one of the reasons for allowance. EX1002 at 34 (emphasis added).

Despite this, Petitioners never map the “parameter set” claim language to anything in the prior art. Instead, Petitioners use the terms “parameter” and “parameter set” interchangeably, ignoring (1) the distinctions described in the specification, and (2) the fact that the Challenged Claims themselves use the terms to refer to different things. *See, e.g.*, EX1001 Claim 1 at 21:56-58 (“the optical network unit starting to use the **upstream burst overhead parameters** suitable for the optical network unit” (emphasis added)), 21:64-66 (“the optical line terminal determining and identifying N kinds of **upstream burst overhead parameter sets** according to different levels of link quality” (emphasis added)). As discussed further below, Petitioners did not identify anything in the Asserted Ground that could teach or render obvious the claimed parameter sets, and therefore the Petition should be denied.

For example, Petitioners state for limitation 1.PRE that G.984.3 discloses “that multiple upstream burst overhead parameter sets can be sent to the ONU for future use,” citing EX1005 at 109-110. Pet. at 17-18. However, Petitioners never attempt to map the “parameter sets” to anything in EX1005, and it is apparent from Petitioners’ highlighting of that reference that they are relying on the disclosure of determining individual parameter values—not a value indicating a **set** of parameters:

Upstream_Overhead message			
Octet	Content	Description	Example value
1	11111111	Broadcast message to all ONUs.	
2	00000001	Message identification "Upstream_Overhead".	
3	gggggggg	Number of guard bits.	32 (G) (see Note 1)
4	xxxxxxx	Length of type 1 preamble bits.	8 (P1) (see Note 1)
5	yyyyyyyy	Length of type 2 preamble bits.	8 (P2) (see Note 1)
6	ccccccc	Pattern of type 3 preamble pattern.	AA
7	bbbbbbb	Pattern of byte 1 of delimiter.	0xAB
8	bbbbbbb	Pattern of byte 2 of delimiter.	0x59
9	bbbbbbb	Pattern of byte 3 of delimiter.	0x83
10	xxemsspp	xx – Reserved e – Status of pre-equalization mechanism m – Status of SN_Mask mechanism ss – Max number of extra SN-transmissions	0 (See Note 2)
11	ddddddd	MSB of pre-assigned delay.	0 (See Note 2)
12	ddddddd	LSB of pre-assigned delay.	0 (See Note 2)
General note – The values in this message, except for P1 and P2, are selected according to OLT parameters and preferences. NOTE 1 – Given that the total length of the burst overhead is L (L maximum value is 128 bytes), the values for G, P1, P2, P3 (number of type 3 preamble bytes) and D (delimiter length) must satisfy $G+P1+P2+P3+D=L$. The Extended_Burst_Length message may pre-empt the value of L by modifying the value of P3 (for both pre-ranged and ranged states). It is the responsibility of the OLT to ensure that the total length of the burst overhead is an integer number of bytes. NOTE 2 – It is assumed that the pre-assigned delay is not used and that the SN value is transmitted once by the ONUs. Note also that since the Serial_Number_Mask message has been deprecated, the m bit should always be set to 0.			

Pet. at 18 (annotating EX1005 at 109-110).

As shown above, the “Upstream_Overhead message” for G.984.3 identifies multiple individual parameter values spread across multiple octets: Octet 3 contains the “Number of guard bits,” Octets 4-5 contain the length of specific preamble bits, Octet 6 the type 3 preamble pattern, etc. None of those are “parameter sets”—each is instead the value (or part of the value) for an individual parameter. Petitioners do not argue otherwise, explaining that “[t]he upstream burst overhead parameters []

are formed as dictated by the OLT,” and omitting any discussion of parameter **sets**. Pet. at 18 (internal quotes omitted); EX2001 ¶¶45-49.

Petitioners do not mention parameter sets again until limitation 1.E, and then they simply assert that “[a]s previously explained in claim limitations [1.PRE]-[1.C], G.984.3 discloses, during initialization, that the OLT determines and identifies upstream burst overhead parameter sets for the ONU and then sends the upstream burst overhead parameter sets to the ONU via the Upstream_Overhead message.” Pet. at 31. However, Petitioners’ analysis of limitations 1.A-1.C does not even mention parameter **sets** (much less show how they could be disclosed by G.984.3), and as discussed above 1.PRE only addresses individual parameters—not parameter sets.

Petitioners continue this conclusory analysis, asserting that “[t]he upstream burst overhead parameter sets include the state of FEC (on or off).” Pet. 32. However, stating that the unidentified parameter sets “include” the state of the FEC does nothing to explain what in G.984.3 could constitute the actual parameter **sets**. Identifying and/or determining an individual parameter is not the same as identifying/determining a parameter **set**. And Petitioners’ citation to EX1005 at 93 supports the conclusion that FEC is identified and determined as just another individual parameter. Pet. at 18, 32. For example, the reference states that “[t]he OLT sets the desired ONU FEC encoding status (on/off) using the Use_FEC bit in

the Flags field.” EX1005 at 93. Relying on a bit dedicated solely to (and even named after) the individual FEC field contradicts their implicit assertion that this FEC bit is somehow part of a parameter set. *See* EX2001 ¶¶50-53.

Petitioners then assert that Khermosh “teaches that the OLT determines and identifies N kinds of upstream burst overhead parameter sets according to different levels of link quality.” Pet. at 33. But yet again, Petitioners never actually map anything to the claimed parameter sets. Instead, Petitioners focus solely on a single potential parameter (“FEC”), because Khermosh does not address any other parameters (or even the possibility of multiple parameters). Because Khermosh does not even address the possibility of other parameters, the disclosure cannot possibly teach or render obvious the claimed parameter sets. *See* EX2001 ¶¶50-53.

Thus, G.984.3 and Khermosh, both alone or in combination, cannot teach or render obvious the “parameter set” limitations of the Challenged Claims.

B. The Board should exercise its discretion to deny the Petition under *Fintiv*

The Board should exercise its discretion to deny the Petition under *Fintiv*. Patent Owner sued Petitioner AT&T Services Inc. (“AT&T”) for infringement of the ’359 Patent on May 26, 2023 in *Iarnach Technologies Ltd. v. AT&T Services Inc., et al.*, Case No. 2:23-cv-00231 (E.D. Tex.) (the “AT&T Proceeding”). *See* EX1035 at 2-3. AT&T was served with the complaint no later than May 30, 2023. EX2004 at 2. Yet, AT&T delayed filing its IPR challenge until May 30, 2024—the

last possible day under statute. *See* Pet. at 87; 35 U.S.C. § 315(b). AT&T’s lack of diligence is highlighted by the fact that it identified the same invalidity grounds based on G.984.3 and Khermosh as part of its invalidity contention in the district court case on December 7, 2023—more than five months before it filed its Petition. EX2002 at 57-58, 564. Petitioners’ lack of diligence in filing their Petition demonstrates that its actions are purely meant to “increase, rather than limit, litigation costs,” and thus the Petition should be denied under *Fintiv*. *See* Director’s *Fintiv* Guidance at 1 (June 21, 2022), available at https://www.uspto.gov/sites/default/files/documents/interim_proc_discretionary_denials_aia_parallel_district_court_litigation_memo_20220621_.pdf.

The Director has discretion to deny institution under 35 U.S.C. § 314(a). *Cuozzo Speed Techs., LLC v. Lee*, 136 S. Ct. 2131, 2140 (2016). The Board should exercise such discretion here and deny the Petition because the same invalidity arguments will be addressed, and resolved, in the co-pending district court proceedings before the Board would issue a final written decision in this proceeding.

The Board considers the presence and status of parallel district court litigation in determining whether to deny institution. *See NHK Spring Co. Ltd. v. Intrix-Plex Techs. Inc.*, IPR2018-00752, Paper 8, at 20 (P.T.A.B. Sept. 12, 2018) (precedential); *Apple Inc. v. Fintiv, Inc.*, IPR2020-00019, Paper 15, at 17 (P.T.A.B. May 13, 2020) (informative) [hereinafter “*Fintiv*”]; *see also Gen. Plastic Indus. Co., Ltd. v. Canon*

Kabushiki Kaisha, IPR2016-01357, Paper 19, at 16-17 (P.T.A.B. Sept. 6, 2017)

(“[W]e recognize that an objective of the AIA is to provide an effective and efficient alternative to district court litigation . . .”). *Fintiv* “sets forth factors that balance considerations of system efficiency, fairness, and patent quality when a patent owner raises an argument for discretionary denial due to the advanced state of a parallel proceeding.” *Fintiv*, Paper 15, at 7-8.

The factors are:

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. “[T]he Board examines these factors, which relate to whether efficiency, fairness, and the merits support the exercise of authority to deny institution. In evaluating the factors, the Board takes a holistic view of whether efficiency and integrity of the system are best served by denying or instituting review.” *Id.* (internal citations omitted). Additionally, on June 21, 2022, USPTO Director Vidal issued interim

guidance for discretionary denial analysis (hereinafter the “Director’s Guidance”).⁵

As detailed below, these factors favor discretionary denial under §314(a).

As noted above, the AT&T Proceeding is ongoing in the Eastern District of Texas. The ’359 Patent is also currently asserted in *Iarnach Technologies Ltd. v. Verizon Business Network Services LLC, et al.*, Case No. 2:23-cv-00631 (E.D. Tex.) (Filed Dec. 28, 2023) (the “Verizon Proceeding”). EX1036 at 4. The Fintiv factors support denial of the Petition based on these ongoing proceedings as discussed below.

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

Both the AT&T Proceeding and the Verizon Proceeding are ongoing in the Eastern District of Texas. No party in either proceeding has moved for a stay, nor is there evidence that one may be granted if the Petition is instituted. Thus, this factor is neutral. *See Sand Revolution II, LLC v. Continental Intermodal Group-Trucking LLC*, IPR2019-01393, Paper 24 at 7 (P.T.A.B. June 16, 2020) (informative).

⁵ Available at https://www.uspto.gov/sites/default/files/documents/interim_proc_discretionary_denials_aia_parallel_district_court_litigation_memo_20220621_.pdf.

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

Trial in the AT&T Proceeding is scheduled for March 17, 2025. EX1022 at 1. Trial in the Verizon Proceeding is scheduled for September 22, 2025. EX1025 at 1. In addition to the district court’s schedule, the Director’s Guidance has suggested that parties refer to the median time to trial for a district as well when evaluating the *Fintiv* factors. Director’s Guidance at 8-9. The AT&T Proceeding was filed on May 26, 2023, EX1035 at 1, and the Verizon Proceeding was filed December 28, 2023, EX1036 at 1. The statistics for EDTX submitted by Petitioner show a median time to trial of 21.4 months, and more recent statistics show a similar median time to trial of 21.6 months. EX1024 at 35; EX2005 at 35. Scheduled and projected dates for both proceedings are shown in the table below:

Proceeding	Complaint Filed	Scheduled Trial Date	Projected Trial Date
AT&T	May 26, 2023	Mar. 17, 2025	Mar., 2025
Verizon	Dec. 28, 2023	Sept. 22, 2025	Oct., 2025 ⁶

⁶ Petitioners suggest a projected trial date of December 2025 for the Verizon proceeding. Pet. at 81. It is not clear how they arrived at that result, given that 21.4 months after the Dec. 28, 2023 filing date falls in early to mid-October 2025.

Patent Owner is filing this Preliminary Response on September 13, 2024. If the Board reaches its institution decision within three months of receiving the preliminary response, 35 U.S.C. §314(b), and issues a final written decision within 1 year of institution, 35 U.S.C. §316(a)(11), a final written decision would likely not issue until around December 2025. Thus, the scheduled and projected trial dates for the AT&T Proceeding (which involve the Petitioners here) would both occur 9 months before an expected final written decision, and the scheduled and projected trial dates for Verizon Proceeding would still occur 2-3 months before an expected final written decision. Thus, this factor weighs strongly in favor of denial.

Petitioners suggest this factor does not support denial because they speculate that events beyond the trial date might not complete before the final written decision in this IPR. Pet. at 81. Petitioners cite no support for the proposition that a nebulous milestone beyond the trial date should be considered instead of the trial date.

Furthermore, while Patent Owner addresses both the AT&T and Verizon Proceedings for the sake of completeness, Patent Owner is not aware of any requirement that **all** parallel proceedings must finish prior to the expected final written decision date in order for this factor to support denial.⁷ Nor would such a

⁷ The sole opinion Petitioners cite in support (*HP Inc. et al. v. Neodron Ltd.*, IPR2020-00459, Paper 17 at 38 (PTAB Sep. 9, 2020)) is not relevant to this

requirement make sense—the completion of the first trial (and duplication of effort) in the AT&T Proceeding alone is enough to result in the kind of inefficiency and duplication that *Fintiv* is meant to avoid. The possibility that this duplication will occur not just once with the AT&T Proceeding, but a second time with the Verizon Proceeding provides even more support for denial than if there were just a single duplicative parallel proceeding.

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

The investment in the parallel proceedings is significant. In the AT&T Proceeding, the parties have already filed their Claim Construction briefing, and have a Claim Construction Hearing scheduled for September 19, 2024. EX1022 at 3-4. By the institution decision deadline of December 13, 2024, the parties will have served expert reports, completed expert discovery, and filed dispositive and *Daubert* motions. *Id.* Thus, the significant investment in the AT&T Proceeding alone supports denial under this factor.

proceeding. *See* Pet. at 80. In the *Neodron* case, the Board analyzed factors 2 and 5 together and the “neutral” finding turned on the fact that some of the Petitioners did not even have set trial dates. Petitioners in this IPR are parties to the earlier AT&T Proceeding, which has a set trial date.

Further increasing the investment in parallel proceedings, the Verizon Proceeding will be in the middle of the *Markman* process by the institution decision deadline, with preliminary claim construction statements served. EX1025 at 4. Thus, while the investment in the AT&T Proceeding alone is enough to support denial, the additional investment in the Verizon Proceeding adds even more weight in favor of denial.

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

The same G.984.3 and Khermosh references are asserted against the '359 Patent in both the AT&T and Verizon Proceedings. EX2002 at 57-58 (AT&T Proceeding); EX2003 at 57-58 (Verizon Proceeding). Petitioners suggest this near complete overlap does not support denial because the "Petition covers a number of claims that are not asserted in the AT&T case." Pet. at 82. However, in the AT&T Proceeding Petitioners challenged validity of '359 Patent Claims 1-3 and 5-9, EX2002 at 55, while here Petitioners have only added dependent Claims 4 and 10-11, Pet. at 1. The addition of those three dependent claims does nothing to counter the tremendous overlap that exists. For example, the Petition only includes 3 pages of non-duplicative substantive analysis addressing Claim 4. Pet. at 57-60. All analysis in the Petition for Claims 10-11 is duplicative of other overlapping Claims. Pet. at 61 n.9 (Claim 11), 74 n.11 (Claim 10). Thus, Petitioners' inclusion of three

additional dependent claims does little (if anything) to counter the near total overlap between the proceedings.

Petitioners also declined to make a *Sotera* stipulation, and instead stipulated only to not use “the **specific combination** of prior art references set forth in the grounds presented in this Petition.” Pet. at 82 (emphasis added). This stipulation does very little to decrease the overlap between the proceedings, as the wording suggests Petitioners intend to continue asserting minor variations of the Petition grounds in the district court litigation. Petitioners cite *Sand Revolution II* for support, however the Petitioner in that proceeding did not limit itself to the “specific combination” of references, and the Board still found that such a stipulation only “weigh[ed] **marginally** in favor of not exercising discretion.” *Sand Revolution II LLC v. Continental Intermodal Group-Trucking LLC*, IPR2019-01393, Paper 24 at 11-12 (P.T.A.B. June 16, 2020) (emphasis added) (informative).

Here, Petitioners’ heavily qualified stipulation would at best render this factor neutral if this proceeding was viewed alone. However, Petitioners ignore the Verizon Proceeding, which is also asserting the same G.984.3 and Khermosh invalidity references against the same claims as the AT&T Proceeding. Pet. at 82; EX2002 at 55, 57-58 (AT&T Proceeding); EX2003 at 55, 57-58 (Verizon Proceeding). There is no stipulation from any party involved in the Verizon Proceeding, so even if Petitioners’ heavily qualified stipulation provided some marginal weight against

denial, that weight would be countered by the same overlap that exists with the Verizon Proceeding. Thus, this factor favors denial of institution.

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

Petitioners AT&T and Nokia and Patent Owner Iarnach are all parties to the co-pending AT&T Proceeding. *See* Pet. at 8, 80, 83. Under the Board’s precedential *Sotera* opinion, when the parties are the same this factor supports denying institution. *Sotera Wireless, Inc. v. Masimo Corp.*, IPR2020-01019, Paper 12 at 19 (P.T.A.B. Dec. 1, 2020) (precedential).

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

As discussed above, the merits of this Petition are weak. Petitioners failed to map the “parameter set” limitations to anything in the purported prior art, instead treating them as equivalent to the “parameter” limitations despite the distinctions identified in the specification and claims.

Additionally, the circumstances created by Petitioners’ delay in filing their Petition further supports discretionary denial. As discussed above, Petitioners waited until the last possible day under statute to file their challenge despite identifying the same invalidity grounds in their district court invalidity contentions five months prior. EX2002 at 57-58, 564. As a result, there is little chance that this proceeding will complete before either one of the parallel proceedings (let alone both of them).

Petitioners' delay means that instituting an IPR at this stage would likely only duplicate work in the district court proceedings, rather than "provide an effective and efficient **alternative** to district court litigation." *See NHK Spring* at 20 (quoting *Gen. Plastic* at 16-17) (emphasis added).

On balance, the *Fintiv* factors favor discretionary denial.

VIII. Conclusion

Patent Owner respectfully requests that the Board refuse to institute *inter partes* review for the reasons stated herein.

Dated: Sept. 13, 2024

Respectfully submitted,

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CERTIFICATE OF SERVICE

The undersigned certifies that pursuant to 37 C.F.R. § 42.6(e), a copy of the foregoing was served via email to lead and backup counsel of record for Petitioners as follows:

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CERTIFICATE OF COMPLIANCE

Pursuant to 37 C.F.R. § 42.24(d), the undersigned hereby certifies that this brief complies with the type-volume limitation of 37 C.F.R. § 42.24 because this brief contains 5,248 words.

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