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Paper 11
Entered: May 28, 2025

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

INTEL CORPORATION, LENOVO (UNITED STATES) INC., and MOTOROLA MOBILITY LLC,
Petitioner,

v.

COLLISION COMMUNICATIONS, INC.,
Patent Owner.

IPR2025-00301
Patent 9,814,071 B2

Before BART A. GERSTENBLITH, CHARLES J. BOUDREAU, and KEVIN C. TROCK, *Administrative Patent Judges*.

GERSTENBLITH, *Administrative Patent Judge*.

DECISION
Denying Institution of *Inter Partes* Review
35 U.S.C. § 314
Denying Petitioner's Motion for Joinder
35 U.S.C. § 315(c)

I. INTRODUCTION

A. Background

Intel Corporation, Lenovo (United States) Inc., and Motorola Mobility LLC (collectively, "Petitioner") filed a Petition (Paper 3, "Pet.") requesting institution of *inter partes* review of claims 1–11, 16, and 21 ("the Challenged Claims") of U.S. Patent No. 9,814,071 B2 (Ex. 1001, "the '071 patent"). Accompanying the Petition, Petitioner filed a Motion for Joinder, seeking to join IPR2024-01248. Paper 2 ("Motion"). Collision Communications, Inc. ("Patent Owner") filed a Corrected Opposition to Petitioner's Motion (Paper 8)[1] and Petitioner filed a Reply in support of its Motion (Paper 9). In addition, Patent Owner filed a Preliminary Response to the Petition. Paper 10 ("Prelim. Resp.").

After the papers were filed in this proceeding, the Board denied institution of *inter partes* review in IPR2024-01248 (*see Samsung Elecs. Am., Inc. v. Collision Commc'ns, Inc.*, IPR2024-01248, Paper 11 (PTAB Mar. 21, 2025)), the petitioner in that proceeding filed a Request for Director Review (IPR2024-01248, Paper 12), and Patent Owner filed a Response to the Director Review Request (IPR2024-01248, Paper 14). The Director Review Request in IPR2024-01248 is currently pending.[2]

[1] Patent Owner's initial Opposition was expunged at Patent Owner's request. *See* Ex. 3001 (e-mail exchange regarding expungement).

[2] Acting Director Stewart recused herself from the proceeding and the Director Review Request was delegated to Senior Lead Administrative Patent Judge Michelle N. Ankenbrand, performing the duties of the PTAB Director Review Executive. *See* IPR2024-01248, Paper 13 (Notice of Delegation).

An *inter partes* review may be instituted only if "the information presented in the petition . . . and any [preliminary] response . . . shows that there is 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). Institution of *inter partes* review, however, is discretionary. *See Harmonic Inc. v. Avid Tech., Inc.*, 815 F.3d 1356, 1367 (Fed. Cir. 2016) ("[T]he PTO is permitted, but never compelled, to institute an IPR proceeding."). For the reasons discussed below, we exercise discretion pursuant to 35 U.S.C. § 314(a) not to institute *inter partes* review. Additionally, for the same reasons and because institution was denied in IPR2024-01248, we deny Petitioner's Motion for Joinder. *See* 35 U.S.C. § 315(c) ("[T]he Director . . . may join as a party . . . any person who properly files a petition under section 311 that the Director . . . determines warrants the institution of an inter partes review under section 314.").

B. Related Proceedings

The parties identify the following pending litigation involving the '071 patent: *Collision Communications, Inc. v. Samsung Electronics Co.*, 2-23-cv-00587 (E.D. Tex.); *Collision Communications, Inc. v. Lenovo Group Limited*, 2-23-cv-00594 (E.D. Tex.); *Ericsson Inc. v. Collision Communications, Inc.*, IPR2022-01233 (PTAB); *Collision Communications, Inc. v. Telefonaktiebolaget LM Ericsson*, 2-21-cv-00327 (E.D. Tex.); *Collision Communications, Inc. v. Nokia Corporation*, 2-21-cv-00308 (E.D. Tex.); and IPR2024-01248. Pet. 101–02; Paper 5 (Patent Owner's Mandatory Notices), 2–3. Patent Owner also identifies the following as related proceedings: IPR2024-01247, IPR2024-01249, IPR2024-01250,

IPR2024-01500, IPR2025-00011, IPR2025-00284, IPR2025-00285, IPR2025-00302, and IPR2025-00303. Paper 5, 3–4.

C. Real Parties in Interest

Petitioner identifies Intel Corporation, Lenovo (United States) Inc., Motorola Mobility LLC, and Lenovo Group Limited as real parties in interest. Pet. 101. Patent Owner identifies Collision Communications, Inc. as the real party in interest. Paper 5, 2.

D. The Asserted Grounds of Unpatentability and Declaration Evidence

Petitioner challenges the patentability of claims 1–11, 16, and 21 of the '071 patent on the following five grounds (Pet. 1):

Claim(s) Challenged	35 U.S.C. §[3]	Reference(s)/Basis
1–11, 16, 21	103(a)	Jin[4]
6–7	103(a)	Jin, Tsai[5]
8–9	103(a)	Jin, Vrzic[6]
1–11, 16, 21	103(a)	Baum[7]

[3] The Leahy-Smith America Invents Act ("AIA") included revisions to 35 U.S.C. § 103 that became effective on March 16, 2013. The '071 patent was filed before March 16, 2013 (*see, e.g.*, Ex. 1001, code (22)), and, therefore, we apply the pre-AIA version of the statutory basis for unpatentability.

[4] U.S. Patent Application Publication No. US 2005/0286408 A1, published Dec. 29, 2005 (Ex. 1004, "Jin").

[5] U.S. Patent Application Publication No. US 2010/0054200 A1, published Mar. 4, 2010 (Ex. 1006, "Tsai").

[6] U.S. Patent Application Publication No. US 2014/0161068 A1, published June 12, 2014 (Ex. 1007, "Vrzic").

[7] U.S. Patent No. 5,867,478, issued Feb. 2, 1999 (Ex. 1005, "Baum").

Claim(s) Challenged	35 U.S.C. §[3]	Reference(s)/Basis
6–7	103(a)	Baum, Tsai

Additionally, Petitioner supports its challenge with a Declaration of Paul S. Min, Ph.D. (Ex. 1003).[8] Patent Owner supports its Preliminary Response with a Declaration of Giuseppe Caire (Ex. 2001).

E. The '071 Patent

The '071 patent relates to "ad hoc wireless multiuser digital communication systems." Ex. 1001, 1:22–24. The '071 patent explains that shared, multiuser networks allowing multiple users, or "nodes," to share a common communication medium were previously known in the art. *Id.* at 1:37–40. According to the '071 patent, although these shared networks provide certain advantages, they cannot accommodate more than one node sending information on the shared medium at any particular time. *Id.* at 1:37–45. The '071 patent discusses the prior art shared networks in connection with Figure 1A, which is reproduced below.

[8] Petitioner explains that "Dr. Min has adopted his prior opinions set forth in EX1003 (submitted in IPR2024-01248) and, for expediency, this Petition cites to Dr. Min's previously submitted declaration, also presented herein as EX1003." Pet. 6 n.1.

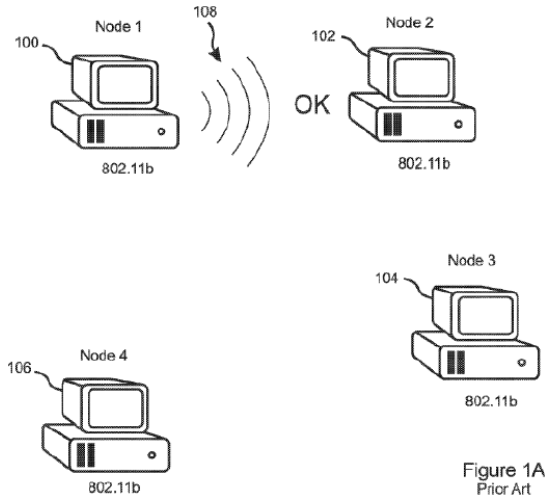

Figure 1A "is a functional diagram illustrating a single packet transmission on a shared, ad hoc, wireless, multiuser digital communication network of the prior art." *Id.* at 6:7–9.

The communication network of Figure 1A has nodes 100, 102, 104, and 106 "in communication through a wireless 802.11b network." Ex. 1001, 6:34–37. Figure 1A shows node 100 sending packet 108 to node 102. *Id.* at 6:41–42. During transmission of packet 108, "no other communication is attempted on the network," which facilitates successful transmission, but requires nodes 104 and 106 to abstain from communicating, slowing communication. *Id.* at 6:42–49.

The '071 patent discloses that "[a] method is claimed that employs multiuser detection (MUD) technology so as to allow a plurality of nodes to transmit simultaneously over a shared communication channel in a wireless ad hoc digital network." Ex. 1001, 3:17–20. The '071 patent explains that

> MUD technology distinguishes, or "demodulates," overlapping digital signals by capitalizing on differences in certain signal parameters that are applicable to the digital signals, such as, but not limited to, analog signal parameters that may include signal amplitude, signal phase, and relative time delay. In a wireless network, all of these parameters will be affected by the relative

> distances between nodes, as well as by the presence of any intervening buildings or other structures, or any environmental anomalies that affect, attenuate and/or reflect the signals. Multiple signals can be distinguished using MUD technology, so long as the signal parameters for each of the overlapping signals are known, or can be accurately estimated.

Id. at 7:13–25.

The '071 patent shows "an embodiment of the present invention" in Figure 1C. Ex. 1001, 7:26–27. Figure 1C is reproduced below.

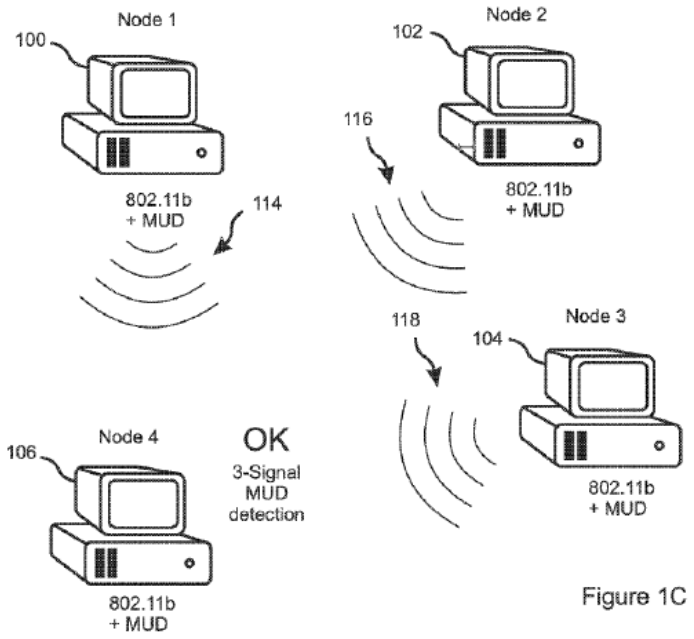

Figure 1C

Figure 1C shows "successful simultaneous transmission of a plurality of packets on a shared, ad hoc, wireless, multiuser digital communication network." *Id.* at 6:13–16.

The network in Figure 1C resembles the network of Figure 1A, but in the network of Figure 1C, each of nodes 100, 102, 104, 106 implements MUD detection. Ex. 1001, 7:27–30. The '071 patent explains that

> a spread-spectrum technology (not illustrated) is used to provide at least three separate, low-rate parameter channels. Three of the nodes 100, 102, 104 have each acquired one of

> these parameter channels, and are transmitting parameter-estimating symbol patterns on the parameter channels while simultaneously transmitting data packets 114, 116, 118 to a fourth node 106.

Id. at 7:30–36. Fourth node 106's MUD detector can use the parameter-estimating symbol patterns to accurately estimate the signal parameters for the transmitting nodes. *Id.* at 7:56–59. Fourth node 106 can use the estimated parameters "to demodulate the three packets 114, 116, 118 and receive all of them." *Id.* 7:56–61.

The '071 patent discusses communication channels in more detail in connection with Figure 3, which is reproduced below.

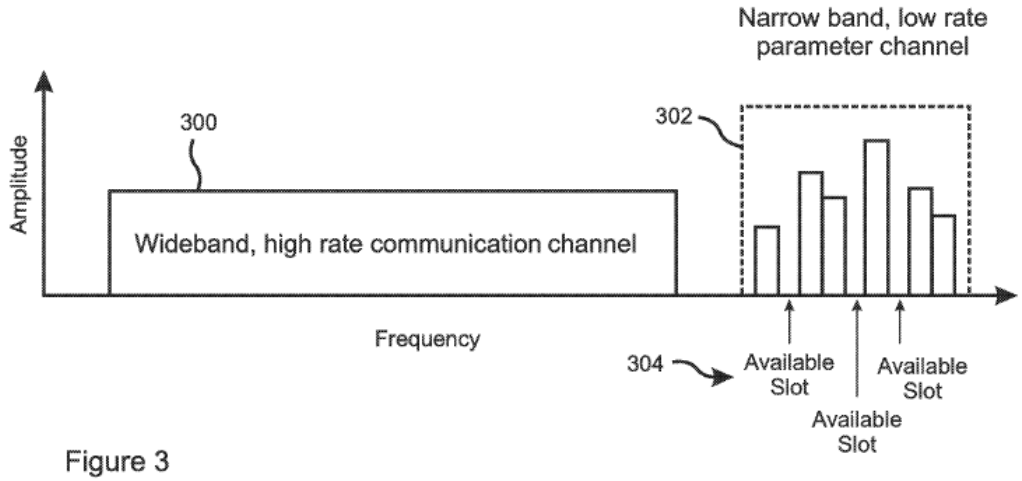

Figure 3

Figure 3 shows "FDMA spreading is used to spread a shared communication medium into a main communication channel 300 and a plurality of parameter channels 302." Ex. 1001, 8:27–30. "The main communication channel 300 is a high rate channel and so requires a wide frequency bandwidth. The plurality of parameter channels 302 or 'slots' are clustered together in a narrow range of frequencies 302." *Id.* at 8:30–34.

The '071 patent discusses methods of transmitting information in connection with Figure 4. Figure 4 is reproduced below.

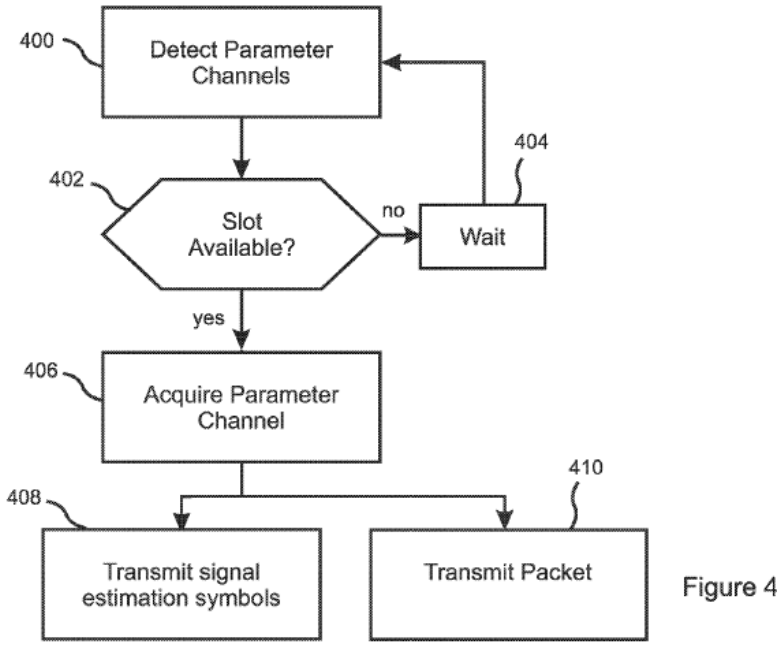

Figure 4

Figure 4 "is a flow diagram that illustrates the steps followed by a node that is seeking to transmit a packet on the network of [Figure] 3." Ex. 1001, 8:43–45. At 400 and 402, the node detects parameter channels and determines if any slot is available. *Id.* at 8:46–47. If no parameter channels are available, at 404, the node waits and keeps monitoring the parameter channels. *Id.* at 8:47–49. If a parameter channel is open, at 406, the node obtains one of the parameter channels. *Id.* at 8:49–50. At 408, the node sends a parameter-estimating symbol pattern. *Id.* at 8:49–51. Simultaneously, at 410, the node transmits the packet on the main communication channel. *Id.* at 8:49–53.

The '071 patent discusses a method of receiving information in connection with Figure 5, which is reproduced below.

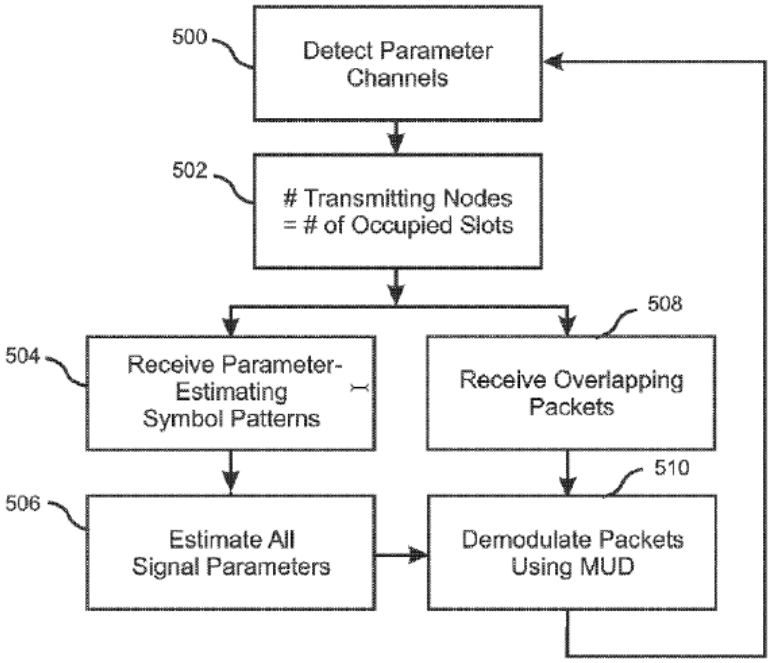

Figure 5

Figure 5 "is a flow diagram that illustrates the steps followed by a node that is seeking to receive a packet on the network of [Figure] 3." Ex. 1001, 8:54–56. At 500, the receiving node detects and obtains all of the parameter channels' traffic. *Id.* at 8:56–57. As shown at 502, the transmitting node can ascertain how many nodes are transmitting from the number of occupied slots. *Id.* at 8:57–59. At 504, the receiving node can use the parameter-estimating symbol patterns to estimate each transmitting node's signal parameters, "including amplitude, phase, and relative time delay." *Id.* at 8:59–63. At 506, "[t]he estimated parameters are then provided to the MUD detector." *Id.* at 8:65–67. This allows the MUD detector to demodulate and individually receive the overlapping, simultaneously received information packets at 508 and 510. *Id.* at 8:65–9:2.

F. Illustrative Claim

Claims 1 and 21 are the only independent challenged claims. Each of claims 2–11 and 16 depends, directly or indirectly, from claim 1. Claim 1 is

illustrative of the claimed subject matter and is reproduced below with Petitioner's bracketing added for reference:

> 1. [1pre] A method for enabling a receiving node to distinguish information simultaneously received from a plurality of transmitting nodes on a shared communication channel of a wireless digital network, the method comprising:
>
> [1a] providing a plurality of parameter channels on the network in addition to the shared communication channel;
>
> [1b] requiring each transmitting node to transmit a parameter-estimating signal on an unshared said parameter channel;
>
> [1c] detecting the parameter-estimating signals on the unshared parameter channels and estimating therefrom at least one unique signal parameter for each of the transmitting nodes; and
>
> [1d] detecting and distinguishing the information simultaneously received from each of the transmitting nodes according to their respective said unique estimated signal parameters.

Ex. 1001, 9:12–28; *see* Pet. 3 (indicating Petitioner's bracketing).

II. DISCRETIONARY REVIEW UNDER 35 U.S.C. § 314(A)

The Board's decision in *Apple Inc. v. Fintiv, Inc.*, IPR2020-00019, Paper 11 (PTAB Mar. 20, 2020) (precedential) ("*Fintiv*"), identifies a non-exclusive list of factors the Board considers when addressing whether a related, parallel district court action provides a basis for discretionary denial under 35 U.S.C. § 314(a). *Fintiv*, 5–16. These factors include:

> 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 the parallel proceeding;
>
> 5. whether the petitioner and the defendant in the parallel proceeding are the same party; and
>
> 6. other circumstances that impact the Board's exercise of discretion, including the merits.

Id. at 5–6. 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. *Id.* at 6.

Petitioner contends "the *Fintiv* factors . . . favor institution" (Pet. 93), while Patent Owner contends "the *Fintiv* factors heavily weigh in favor of discretionary denial" (Prelim. Resp. 30).

1. Factor 1: Whether the Court Granted a Stay or Evidence Exists that One May Be Granted if a Proceeding is Instituted

Petitioner contends this factor is neutral because no stay has been requested in the district court. Pet. 93. Patent Owner contends this factor weighs in favor of exercising discretion to deny institution because Petitioner does not represent that a stay will be sought in the district court and Judge Gilstrap, who is presiding over the district court case, "has denied the overwhelming majority of motions to stay pending *inter partes* review." Prelim. Resp. 30–31.

We find this factor neutral because no stay has been requested or denied in the related proceeding.

2. Factor 2: Proximity of the District Court's Trial Date to the Board's Projected Statutory Deadline for a Final Written Decision

The district court set a trial date of January 5, 2026. Ex. 2010 (Docket Control Order). Petitioner contends that the trial date and the Board's statutory deadline weigh against exercising discretion to deny institution. Pet. 93. Petitioner also asserts that the trial date will likely be changed to a "February-March 2026 trial date" based on a "four-month delay in service combined with [a] 22-month time-to-trial statistic." *Id.* at 94. Patent Owner contends that "any final written decision would issue ***over five months*** after the trial date" and that "the time to trial for the Eastern District of Texas is 21.6 months," which is "squarely in line with the approximately 21-month schedule set by the district court." Prelim. Resp. 31–32.

At this point, the related proceeding is set for trial starting January 5, 2026. This date is nearly five months prior to the date on which the final written decision would be due if trial were instituted in this proceeding. And, even if we assume Petitioner's alleged February–March 2026 trial date, this date too is several months prior to the projected final written decision deadline. As such, it is unlikely that a final written decision in this proceeding would issue before trial in the district court, unless the trial was delayed or rescheduled for a later time. Thus, we find this factor weighs in favor of exercising our discretion to deny institution. *See ARM Ltd. v. Daedalus Prime LLC*, IPR2025-00207, Paper 10 at 2 (May 16, 2025) (Before the Office of the Under Secretary of Commerce for Intellectual Property and Director of the United States Patent and Trademark Office) (exercising discretion to deny institution with the same relative timing between district court trial and final written decision deadline).

3. Factor 3: Investment in the Parallel Proceeding by the Court and the Parties

Petitioner contends this factor weighs heavily against exercising discretion to deny institution. Pet. 94. Petitioner asserts that Lenovo Group Limited (the defendant in the district court litigation) has challenged personal jurisdiction and that most of the investment in the district court proceeding has been directed to that issue. *Id.* at 94–95. Patent Owner asserts that this factor either favors exercising discretion to deny institution or is neutral. Prelim. Resp. 33. Specifically, Patent Owner contends that the parties will have undertaken substantial discovery and served invalidity contentions and that claim construction briefing will have begun even though a claim construction hearing is not scheduled until July 2025. *Id.* at 33–34 (citing Ex. 2010).

Although the parties and district court have invested in the parallel proceeding, the investment (based on the stage of the case) is not as substantial as it will be as the case progresses. Accordingly, we find this factor weighs slightly against exercising discretion to deny institution.

4. Factor 4: Overlap Between Issues Raised in the Petition and in the Parallel Proceeding

Petitioner contends this factor is neutral even though Petitioner "acknowledge[s] that the grounds of invalidity asserted here are also asserted in the district court." Pet. 95. Petitioner also states that if the Board were to address overlapping validity issues prior to the district court reaching them at trial, the issues for trial would be simplified or fully resolved, and thus this factor weighs in favor of institution. *Id.* Patent Owner contends the same claims are challenged in the district court and there is a substantial overlap of issues. Prelim. Resp. 34. Patent Owner also

asserts that Petitioner's argument—that issues before the district court will be simplified if they are resolved here—is unfounded because the district court trial is scheduled to start months before the deadline for any final written decision. *Id.* at 35.

We find that the overlap in the issues raised in the Petition and district court weigh in favor of exercising our discretion to deny institution.

5. Factor 5: Whether the Petitioner and the Defendant in the Parallel Proceeding are the Same Party

Petitioner contends that this factor is neutral because while the Petitioner and named defendant are different entities, "Lenovo (United States) and Motorola Mobility LLC manufacture the accused products at issue in the litigation, and named defendant Lenovo Group Limited is their ultimate parent and holding company, and Patent Owner has identified Intel products as infringing." Pet. 95. Patent Owner contends that "Petitioner[] effectively concede[s] that the parties materially overlap here." Prelim. Resp. 35. Patent Owner asserts that this factor is not neutral and instead favors exercising discretion to deny institution. *Id.*

Although the parties are different in the district court case, we agree with Patent Owner that this factor weighs somewhat in favor of exercising our discretion to deny institution given the relationships between the parties.

6. Factor 6: Other Circumstances that Impact the Board's Exercise of Discretion, Including the Merits

Petitioner contends that this factor weighs against exercising discretion to deny institution because (a) none of the grounds asserted here were previously considered by the Patent Office or a district court, (b) the '071 patent is asserted in a district court case and this proceeding "provides

the opportunity for narrowing and simplifying the litigation for the district court," and (c) the Petition presents compelling evidence of unpatentability. Pet. 96. Patent Owner contends that the Petition fails to meet the reasonable likelihood standard for institution and thus no other considerations weigh in favor of not exercising discretion to deny institution. Prelim. Resp. 36.

As discussed above, and further below, Petitioner seeks joinder to IPR2024-01248. In that regard, Petitioner represents that the Petition "is substantively the same as the . . . petition" filed in IPR2024-01248—"[i]t challenges the same claims, on the same grounds, and relies on the same prior art." Motion 1. The Board denied institution of *inter partes* review in IPR2024-01248, finding the petition deficient on the merits. *See* IPR2024-01248, Paper 11. Thus, because the instant Petition is substantively the same as the petition denied in IPR2024-01248, the Petition suffers from the same deficiencies identified in that proceeding. Additionally, contrary to Petitioner's assertion, this proceeding would not narrow the issues before the district court since trial is scheduled to begin months before any final written decision deadline here. Therefore, we find that this factor weighs in favor of exercising our discretion to deny institution.

7. Conclusion on Discretionary Denial

When considering the *Fintiv* factors, we take "a holistic view of whether efficiency and integrity of the system are best served by denying or instituting review." *Fintiv*, 6. Based on our review, we find that the factors, overall, weigh in favor of exercising discretion to deny institution of the Petition. The factors weighing in favor of exercising discretionary denial include the scheduling of the parallel district court trial months before the Board's projected statutory deadline for any final written decision, the

overlap between the issues raised in the Petition and in the district court, the relationship between Petitioner and the defendant in the parallel litigation, and the weaknesses of the merits of the Petition (as demonstrated by the denial of institution on the merits in IPR2024-01248). In our view, these factors substantially outweigh the sole factor weighing slightly in favor of not exercising discretion to deny institution—investment in the district court proceeding. We, therefore, are persuaded that the interests of efficiency and integrity of the system would be best served by invoking the authority under 35 U.S.C. § 314(a) to exercise our discretion to deny institution of the Petition.

III. MOTION FOR JOINDER

As noted above, Petitioner filed a Motion for Joinder, seeking to join IPR2024-01248. *See* Motion. As further noted above, institution was denied in IPR2024-01248. *See* IPR2024-01248, Paper 11. And, for the reasons explained above, we exercise our discretion to deny institution in this proceeding. Accordingly, for each of these reasons, Petitioner's Motion is *denied*.

IV. CONCLUSION

For the reasons discussed above, we find that the evidence of record favors exercising our discretion to deny institution of *inter partes* review pursuant to 35 U.S.C. § 314(a), and we deny Petitioner's Motion for Joinder.

V. ORDER

Accordingly, it is

ORDERED that the Petition (Paper 3) is *denied* as to the Challenged Claims of the '071 patent;

FURTHER ORDERED that Petitioner's Motion for Joinder (Paper 2) is *denied*; and

FURTHER ORDERED that no *inter partes* review is instituted.

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