

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

QUALCOMM INCORPORATED,
Petitioner,

v.

NETWORK SYSTEM TECHNOLOGIES, LLC,
Patent Owner.

IPR2024-01081
Patent 7,373,449 B2

Before CHARLES J. BOUDREAU, JOHN R. KENNY, and
STEVEN M. AMUNDSON, *Administrative Patent Judges*.

AMUNDSON, *Administrative Patent Judge*.

DECISION
Granting Institution of *Inter Partes* Review
35 U.S.C. § 314
Granting Motion for Joinder
35 U.S.C. § 315(c); 37 C.F.R. § 42.122

I. INTRODUCTION

Qualcomm Incorporated (“Petitioner”) filed a Petition requesting an *inter partes* review of claims 2, 6, and 9–16 in U.S. Patent No. 7,373,449 B2 (Exhibit 1001, “the ’449 patent”) under 35 U.S.C. §§ 311–319. Paper 1 (“Pet.”). Network System Technologies, LLC (“Patent Owner”) filed a Preliminary Response. Paper 9 (“Prelim. Resp.”). Further, after receiving Board authorization to address certain issues, Petitioner filed a Preliminary Reply, and Patent Owner filed a Preliminary Sur-reply. *See* Paper 11 (“Prelim. Reply”); Paper 12 (“Prelim. Sur-reply”); Ex. 3002.

Concurrently with the Petition, Petitioner filed a Motion for Joinder seeking joinder as a party in *Samsung Electronics Co., Ltd. v. Network System Technologies, LLC*, IPR2024-00338 (“the Samsung IPR”). Paper 3 (“Mot.”). Patent Owner filed a Response to Petitioner’s Motion for Joinder. Paper 7 (“Mot. Resp.”). And Petitioner filed a Reply to Patent Owner’s Response. Paper 10 (“Mot. Reply”).

Under 37 C.F.R. § 42.4(a), we have authority to determine whether to institute an *inter partes* review. We may institute an *inter partes* review only if “the information presented in the petition filed under section 311 and any response filed under section 313 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) (2018). The “reasonable likelihood” standard is “a higher standard than mere notice pleading” but “lower than the ‘preponderance’ standard to prevail in a final written decision.” *Hulu, LLC v. Sound View Innovations, LLC*, IPR2018-01039, Paper 29 at 13 (PTAB Dec. 20, 2019) (precedential).

We also have authority to consider Petitioner’s Motion for Joinder.
See 35 U.S.C. § 315(c); 37 C.F.R. § 42.122 (2024).

Based on the current record and for the reasons explained below, we
(1) institute an *inter partes* review of claims 2, 6, and 9–16 in the ’449 patent
on all challenges included in the Petition and (2) grant Petitioner’s Motion
for Joinder subject to the conditions detailed below.

II. BACKGROUND

A. Real Parties in Interest

Petitioner identifies the following real parties in interest: Qualcomm
Incorporated and Qualcomm Technologies, Inc. Pet. 74. Patent Owner
identifies itself as the sole real party in interest. Paper 6, 2. The parties do
not raise any issue about real parties in interest.

B. Related Matters

Petitioner and Patent Owner identify the following civil actions as
related matters:

- *Network System Technologies, LLC v. Samsung Electronics Co., Ltd. et al.*, No. 2:22-cv-00481 (E.D. Tex. filed Dec. 19, 2022) (the “Samsung litigation”);
- *Network System Technologies, LLC v. Texas Instruments Inc.*, No. 2:22-cv-00482 (E.D. Tex. filed Dec. 19, 2022);
- *Network System Technologies, LLC v. Qualcomm Inc. et al.*, No. 1:22-cv-01331 (W.D. Tex. filed Dec. 19, 2022) (the “Qualcomm litigation”);
- *Network System Technologies, LLC v. Lenovo Group Ltd.*, No. 2:23-cv-00167 (E.D. Tex. Apr. 11, 2023);
- *Network System Technologies, LLC v. Ford Motor Co.*, No. 2:23-cv-00440 (E.D. Tex. filed Sept. 26, 2023); and

- *Network System Technologies, LLC v. OnePlus Technology (Shenzhen) Co., Ltd.*, No. 2:23-cv-00520 (E.D. Tex. filed Nov. 14, 2023).

Pet. 74; Paper 6, 2; Prelim. Resp. 2; Mot. 3–4.

Patent Owner identifies the following Board proceedings as related matters:

- *Samsung Electronics Co., Ltd. v. Network System Technologies, LLC*, IPR2024-00339 (Patent 8,086,800 B2);
- *Qualcomm Inc. and Samsung Electronics Co., Ltd. v. Network System Technologies, LLC*, IPR2024-00343 (Patent 7,594,052 B2); and
- *Qualcomm Inc. and Samsung Electronics Co., Ltd. v. Network System Technologies, LLC*, IPR2024-00355 (Patent 8,072,893 B2).

Paper 6, 2–3.

C. The '449 Patent (Exhibit 1001)

The '449 patent, titled “Apparatus and Method for Communicating in an Integrated Circuit,” issued on May 13, 2008, from an application filed on October 7, 2003. Ex. 1001, codes (22), (45), (54). The patent states that the invention “relates to an integrated circuit having a plurality of processing modules and a network arranged for providing connections between processing modules and a method for exchanging messages in such an integrated circuit.” *Id.* at 1:7–11; *see id.* at code (57).

The '449 patent explains that systems on chip (SoCs) employ a modular approach where “the processing system comprises a plurality of relatively independent, complex modules.” Ex. 1001, 1:15–26. The patent also explains that networks on chip (NoCs) have the following advantages over a bus connecting the modules in an SoC: first, “NoCs help resolve the

electrical problems in new deep-submicron technologies”; and second, “NoCs also decouple computation from communication, which is essential in managing the design of billion-transistor chips.” *Id.* at 1:30–46.

According to the ’449 patent, however, using NoCs with SoCs raises “new issues that must be taken into account” because “the modules communicate remotely via network nodes” in an NoC. Ex. 1001, 1:50–56. “As a result, interconnect arbitration changes from centralized to distributed, and issues like out-of order [sic] transactions, higher latencies, and end-to-end flow control must be handled either by the intellectual property block (IP) or by the network.” *Id.* at 1:56–60.

The ’449 patent notes that many issues concerning on-chip networks “have been already the subject of research in the field of local and wide area networks (computer networks),” i.e., off-chip networks. Ex. 1001, 1:56–63. According to the patent, many topics concerning off-chip networks “are very much related to on-chip networks,” and many of the results off chip “are also applicable on chip.” *Id.* at 1:63–66. The patent cautions, however, that differences between off-chip networks and on-chip networks may require “network design choices [to] be reevaluated” and lead “to different design choices.” *Id.* at 1:66–2:4. For instance, the patent states, “NoC’s premises are different from off-chip networks, and, therefore, most of the network design choices must be reevaluated.” *Id.* at 1:66–2:1.

The ’449 patent explains that the invention rests on “the idea to allow connection channels of a connection with different connection properties.” Ex. 1001, 7:32–34. Thus, “the utilization of the resources of a network on chip is more efficient, since the connection between modules can be efficiently adapted to their actual requirement such that the connection is not

over dimensioned and unused network resources can be assigned to other connections.” *Id.* at 7:26–31.

A “connection is considered as a set of channels, each having a set of connection properties, between a first module and at least one second module.” Ex. 1001, 8:50–52. The “connection properties” include, among other things, (1) “flow control (a remote buffer is reserved for a connection, and a data producer will be allowed to send data only when it is guaranteed that space is available for the produced data),” (2) “throughput (a lower bound on throughput is guaranteed),” and (3) “latency (upper bound for latency is guaranteed).” Ex. 1001, 8:62–9:3; *see id.* at 9:51–65.

The ’449 patent’s Figure 1 (reproduced below) depicts an example SoC:

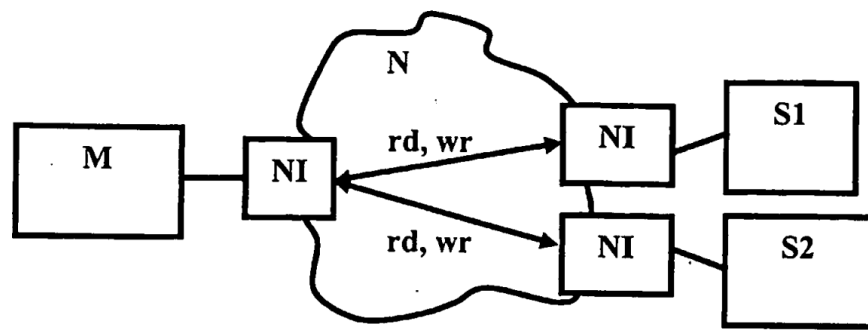


FIG.1

Figure 1 illustrates an SoC including a master module M, a first slave module S1, and a second slave module S2. Ex. 1001, 8:33–34, 9:4–6, Fig. 1. “Each module is connected to a network N via a network interface NI, respectively.” *Id.* at 9:6–7, Fig. 1.

The “network interfaces NI are provided to manage the communication of the respective modules and the network N, so that the modules can perform their dedicated operation without having to deal with

communication with the network or other modules.” Ex. 1001, 9:9–14. The “network interfaces NI can send requests such as read and write between each other over the network.” *Id.* at 9:14–16.

The ’449 patent’s Figure 3 (reproduced below) depicts another example SoC:

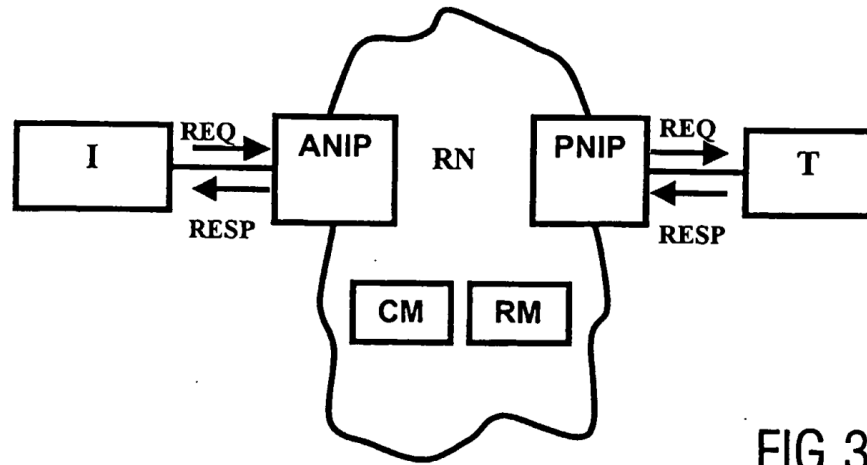


FIG.3

Figure 3 illustrates an SoC including an initiator module I (a master), a target module T (a slave), and a router network RN. Ex. 1001, 8:37–38, 9:17–19, 9:26–29, 9:66–10:1, Fig. 3.

The router network RN includes an active network interface port ANIP connected to the initiator module I and a passive network interface port PNIP connected to the target module T. Ex. 1001, 9:26–29, Fig. 3. The “communication between the initiator module I and the target module T is based on request-response transactions, where the master, i.e. the initiator module I initiates a transaction by placing a request, possibly with some data or required connection properties.” *Id.* at 9:29–34.

The “request REQ is delivered to the slave, i.e. the target module T, via the active network interface port ANIP, the network RN and the passive network interface port PNIP.” Ex. 1001, 9:34–37. The “request is executed

by the target module T and data is returned as a response RESP if necessary or required.” *Id.* at 9:37–39.

The router network RN also includes “a communication manager CM and a resource manager RM.” Ex. 1001, 9:67–10:3, Fig. 3. In Figure 3, “the communication manager CM and the resource manager RM are arranged in the router network RN, but they can also be arranged in one or some of the network interfaces NI.” *Id.* at 10:3–6.

The “communication manager CM request[s] a connection with a set of properties between two modules from the resource manager RM, after receiving the request REQ from the active network interface ports ANIP” where “the properties of a connection, e.g. throughput, flow control, are to be requested when asking for a connection setup.” Ex. 1001, 10:19–24. The “resource manager RM allocates the necessary resources and enquires if such a connection based on these resources is possible.” *Id.* at 10:24–26.

After determining “the available connection properties, the resource manager RM reserves the available connection i.e. the required resources, and responds to the communication manager CM which connection is available, i.e. which connection properties or the required resources thereof are available for the desired channels.” Ex. 1001, 10:41–46. Optionally, “the communication manager CM can accept the connection with the available properties, but on the other hand the communication manager CM may also refuse the offered connection if the available properties or the resources thereof are not acceptable.” *Id.* at 10:46–51.

If “the communication manager CM refuses the offered connection, it sends an error message to the initiator module I (i.e. via the ANIP) and requests the resource module RM to release the reservation of said

connections.” Ex. 1001, 10:51–54. Otherwise, “the resource manager RM sets the connection properties, and establishes a connection with accepted properties between said initiator and target modules.” *Id.* at 10:55–57.

D. The Challenged Claims

The ’449 patent includes eighteen claims as follows:

- (i) independent claim 1 for an “[i]ntegrated circuit”;
- (ii) claims 2–9 that depend directly or indirectly from claim 1;
- (iii) independent claim 10 for a “[m]ethod for exchanging messages in an integrated circuit”; and
- (iv) claims 11–18 that depend directly or indirectly from claim 10.

Ex. 1001, 18:32–20:38.

In the petition in the Samsung IPR, Samsung Electronics Co., Ltd. (“Samsung”) challenged claims 1–6 and 9–16. IPR2024-00338, Paper 2 (“Samsung Pet.”) at 9, 15–68. After Samsung filed the petition, Patent Owner statutorily disclaimed claims 1 and 3–5. Ex. 2062, 3; *see* Prelim. Resp. 12 n.1, 27 n.4.

In this proceeding, Petitioner challenges claims 2, 6, and 9–16. Pet. 10, 16–71.

Claim 10 exemplifies the challenged claims and reads as follows (with formatting added for clarity and with bracketed numbers and letters added for reference purposes):¹

10. [10.pre.1] Method for exchanging messages in an integrated circuit comprising a plurality of modules, the

¹ We use the same numbers and letters that Petitioner uses to identify the claim language. *See* Pet. 45–47.

messages between the modules being exchanged over connections via a network,

[10.pre.2] wherein said connections comprises [sic] a set of communication channels each having a set of connection properties, any communication channel being independently configurable,

[10.pre.3] wherein said connection through the network supports transactions comprising at least one of outgoing messages from the first module to the second module and return messages from the second module to the first module

and further comprising the steps of:

[10.a] the first module issuing a request for a connection with the second module to a communication manager, wherein the request comprises desired connection properties associated with the sets of communication channels;

[10.b] the communication manager forwarding the request to a resource manager;

[10.c] the resource manager determining whether a target connection with the desired connection properties is available;

[10.d] the resource manager responding with the availability of the target connection to the communication manager; and

[10.e] the target connection between the first and second module being established based on the available properties of said communication channels of said connection.

Ex. 1001, 19:21–20:6.

E. The Asserted References

For its challenges, Petitioner relies on the following references:

Name	Reference	Exhibit
Goossens2002	Kees Goossens et al., <i>Networks on Silicon: Combining Best-Effort and Guaranteed Services</i> , Proceedings of the 2002 Design, Automation and Test in Europe Conference and Exhibition, 1–3 (March 2002)	1005
Drake	US 5,461,611, issued October 24, 1995 (based on an application filed June 7, 1994)	1006
Goossens2003	Kees Goossens et al., <i>Guaranteeing the Quality of Services in Networks on Chip</i> , Chapter 4 in <i>Networks on Chip</i> , Kluwer Academic Publishers (Axel Jantsch & Hannu Tenhunen eds., 2003)	1007

Pet. 8–14, 16–71.

Petitioner asserts that:

- (1) Goossens2002 qualifies as prior art “under 35 U.S.C. §§ 102(a) and (b)”;
- (2) Drake qualifies as prior art “under 35 U.S.C. §§ 102(a), (b), and (e)”;
- (3) Goossens2003 qualifies as prior art “under 35 U.S.C. § 102(a).”

Pet. 8–9; *see* 35 U.S.C. § 102(a), (b), (e) (2006).²

As in the Samsung IPR, Patent Owner asserts that Goossens2002 and Goossens2003 were not publicly accessible and, therefore, are not “printed

² The Leahy-Smith America Invents Act (“AIA”), Pub. L. No. 112-29, 125 Stat. 284 (2011), amended 35 U.S.C. § 102 and § 103 effective March 16, 2013. Because the filing date of the challenged claims predates the AIA’s amendments to § 102 and § 103, this decision refers to the pre-AIA versions of § 102 and § 103.

publications” under § 102(a) and § 102(b). *See, e.g.*, Prelim. Resp. 24–26. Petitioner makes the same arguments about public accessibility in this proceeding as Samsung made in the Samsung IPR. In the Samsung IPR, we determined that the evidence established a reasonable likelihood that Goossens2002 and Goossens2003 are printed publications that were publicly accessible before the ’449 patent’s October 7, 2003, filing date. *See* IPR2024-00338, Paper 10 (“Samsung Inst. Dec.”) at 28–30. In this proceeding, Patent Owner does nothing to undermine that determination. *See, e.g.*, Prelim. Resp. 24–26.

F. The Asserted Challenges to Patentability

Petitioner asserts the following challenges to patentability:

Claim(s) Challenged	35 U.S.C. §	Reference(s)/Basis
2, 6, 9–16	103(a)	Goossens2002, Drake
2, 6, 9–16	103(a)	Goossens2003, Drake

Pet. 10, 16–71.

G. Testimonial Evidence

To support its challenges, Petitioner relies on the declaration of Todd Mowry, Ph.D. (Exhibit 1003). Dr. Mowry states, “I have been retained as an expert witness.” Ex. 1003 ¶ 2. Dr. Mowry also states, “I received an M.S. in Electrical Engineering from Stanford University in June 1989, and a Ph.D. in Electrical Engineering from Stanford University in March 1994,” and “am a Professor in the Department of Computer Science at Carnegie Mellon University.” *Id.* ¶¶ 6, 8.

Further, Petitioner relies on the declarations of Gordon MacPherson (Exhibit 1025) and Sean O’Bryan (Exhibit 1027) to establish the public

accessibility of Goossens2002 and Goossens2003, respectively, before the '449 patent's filing date.

To support its positions, Patent Owner relies on the declaration of Erik Chmelar, Ph.D. (Exhibit 2001). Dr. Chmelar states, "I have been retained on behalf of" Patent Owner as "an expert consultant." Ex. 2001 ¶ 2.

Dr. Chmelar also states, "In 2001, I received an M.S. degree in Electrical Engineering from Stanford University, with a focus on computer networks In 2004, I received a Ph.D. degree in Electrical Engineering from Stanford University, with a primary focus on very large-scale integrated (VLSI) systems" *Id.* ¶ 6.

III. ANALYSIS

A. Statutory and Regulatory Provisions

Regarding joinder, § 315(c) permits joinder as a party and states:

If the Director institutes an inter partes review, the Director, in his or her discretion, may join as a party to that inter partes review any person who properly files a petition under section 311 that the Director, after receiving a preliminary response under section 313 or the expiration of the time for filing such a response, determines warrants the institution of an inter partes review under section 314.

35 U.S.C. § 315(c).

Regarding timeliness, § 315(b) requires filing a petition for an *inter partes* review no later than "1 year after the date on which the petitioner, real party in interest, or privy of the petitioner is served with a complaint alleging infringement of the patent." 35 U.S.C. § 315(b). The Board's rules include the same one-year time bar. 37 C.F.R. § 42.101(b). But § 315(b) also provides that the one-year time bar "shall not apply to a request for joinder" under § 315(c). 35 U.S.C. § 315(b); *see* 37 C.F.R. § 42.122(b).

Consistent with § 315(b) and § 315(c), the Board’s rules state:

Any request for joinder must be filed, as a motion under § 42.22, no later than one month after the institution date of any *inter partes* review for which joinder is requested. The time period set forth in § 42.101(b) [the one-year time bar] shall not apply when the petition is accompanied by a request for joinder.

37 C.F.R. § 42.122(b).

The “plain language of § 315(c) requires two different decisions.”

Facebook, Inc. v. Windy City Innovations, LLC, 973 F.3d 1321, 1332 (Fed. Cir. 2020) (“*Facebook*”). First, § 315(c) requires a determination “whether the joinder applicant’s petition for IPR ‘warrants’ institution under § 314.” *Id.* Second, § 315(c) requires an exercise of discretion “to decide whether to ‘join as a party’ the joinder applicant,” i.e., a joinder decision. *Id.* The statute “makes clear that the joinder decision is made *after* a determination that a petition warrants institution, thereby affecting the manner in which an IPR will proceed.” *Id.* (emphasis in original).

B. Whether the Petition Warrants Institution

1. INTRODUCTION

In the Samsung IPR Institution Decision, we determined that Samsung satisfied the “reasonable likelihood” standard for instituting trial. Samsung Inst. Dec. 2, 30–87.

Here, Petitioner presents substantively identical challenges to claims 2, 6, and 9–16 in the ’449 patent based on the same prior art and the same unpatentability theories as Samsung presents in the Samsung IPR. *Compare* Pet. 16–71, *with* Samsung Pet. 15–68. Patent Owner concedes that Petitioner filed “a carbon copy of the Samsung’s petition and evidence.” Mot. Resp. 1.

In the Preliminary Response, Patent Owner makes many of the same arguments that it made in the preliminary response in the Samsung IPR. *Compare* Prelim. Resp. 24–52, with IPR2024-00338, Paper 6 at 39–63. Based on the current record and for the reasons explained in the Samsung IPR Institution Decision, we consider those arguments unavailing. *See* Samsung Inst. Dec. 39–67, 72–86.

In the Preliminary Response, Patent Owner also makes new arguments and urges the Board to deny institution because:

- (1) § 315(b)’s one-year time bar precludes institution;
- (2) Petitioner has taken inconsistent claim-construction positions in this proceeding and the Qualcomm litigation;
- (3) Petitioner has taken inconsistent positions concerning Drake’s disclosure of the claimed “first module”; and
- (4) Goossens2003 fails to disclose the claimed “resource manager” and the claimed “communication manager.”

See Prelim. Resp. 3, 22–24, 28–31, 45–46; *see also* Prelim. Sur-reply 1–3; Mot. Resp. 14–15.

Based on the current record and for the reasons explained below, we consider Patent Owner’s new arguments unavailing. *See infra* §§ III.B.2–III.B.5.

2. WHETHER § 315(B)’S ONE-YEAR TIME BAR PRECLUDES INSTITUTION

(a) Patent Owner’s Contentions

Patent Owner contends that § 315(b)’s one-year time bar precludes institution because:

- (1) Patent Owner served Petitioner with a complaint alleging infringement of the ’449 patent on December 23, 2022; and

- (2) Petitioner filed the Petition on June 21, 2024, i.e., about 18 months after service of the complaint.

Prelim. Resp. 3 (citing 35 U.S.C. § 315(b)); *see* Mot. Resp. 1–2, 14.

Patent Owner asserts that § 315(b)’s provision that the one-year time bar “shall not apply to a request for joinder” under § 315(c) “only applies to the joinder request itself.” Mot. Resp. 15. According to Patent Owner, § 315(b) “allows a party to file a request for joinder after the 1-year deadline for filing an IPR but does not exempt the underlying petition from the 1-year deadline.” *Id.* Patent Owner also asserts that a petition filed after the 1-year deadline is not “properly file[d]” under § 315(c) and, therefore, “cannot serve as basis for a joinder request.” *Id.*

(b) Petitioner’s Contentions

Petitioner contends that the Petition and the Motion for Joinder “were timely filed under [the] statute and the Office’s regulations.” Mot. Reply 3 (citing 35 U.S.C. § 315(b); 37 C.F.R. § 42.122(b)); *see* Mot. 6 (citing 37 C.F.R. § 42.122(b)). Further, Petitioner asserts that the Office’s regulations state that the one-year time bar “does not apply when the petition is accompanied by a joinder request.” Mot. Reply 5 (citing 35 U.S.C. § 315(b); 37 C.F.R. § 42.122(b)).

(c) Analysis

We agree with Petitioner that the one-year time bar in § 315(b) and § 42.101(b) does not apply under the circumstances here. *See* Mot. Reply 3, 5. Referencing § 315(b)’s one-year time bar, the Federal Circuit has explained that § 315(b) “includes a specific exception to the time bar” because “[b]y its own terms, ‘[t]he time limitation . . . shall not apply to a

request for joinder under subsection (c).” *Facebook*, 973 F.3d at 1333 (alterations in original) (quoting 35 U.S.C. § 315(b)).

Consistent with § 315(b) and § 315(c), the Board’s rules provide that “[a]ny request for joinder must be filed, as a motion under § 42.22, no later than one month after the institution date of any *inter partes* review for which joinder is requested.” 37 C.F.R. § 42.122(b). The Board’s rules also provide that § 42.101(b)’s one-year time bar “shall not apply when the petition is accompanied by a request for joinder.” *Id.*

We instituted an *inter partes* review in the Samsung IPR on June 21, 2024. Samsung Inst. Dec. 1. That same day, Petitioner filed the Petition and the Motion for Joinder. Pet. 77; Mot. 12. Under § 42.122(b), Petitioner timely filed the Petition and the Motion for Joinder. *See* 37 C.F.R. § 42.122(b).

Patent Owner’s assertion that a party must file a petition before the 1-year deadline and may later file “a request for joinder after the 1-year deadline” does not accord with the Board’s rules regarding filing the two papers together. *See* Mot. Resp. 15; 37 C.F.R. § 42.122(b). In particular, § 42.122(b) provides that § 42.101(b)’s one-year time bar “shall not apply when the petition is accompanied by a request for joinder.” 37 C.F.R. § 42.122(b).

3. PETITIONER’S CLAIM-CONSTRUCTION POSITIONS

(a) Background

The Board’s rules require that a petition contain certain information, including the following information:

How the challenged claim is to be construed. Where the claim to be construed contains a means-plus-function or step-plus-function limitation as permitted under 35 U.S.C. 112(f), the

construction of the claim must identify the specific portions of the specification that describe the structure, material, or acts corresponding to each claimed function.

37 C.F.R. § 42.104(b)(3).

(b) Patent Owner's Contentions

Patent Owner contends that the Petition fails to comply with § 42.104(b)(3) because Petitioner's position in this proceeding that no claim term requires an explicit construction conflicts with Petitioner's position in the Qualcomm litigation that § 112's means-plus-function provision applies to the term "communication manager" and it is indefinite. Prelim. Resp. 22–23 (citing 37 C.F.R. § 42.104(b)(3); Ex. 2040, 20–21; Ex. 2044, 3). Based on Petitioner's arguments in the Qualcomm litigation, Patent Owner asserts that Petitioner "necessarily disagrees" with Samsung's "plain and ordinary meaning construction" in the Samsung IPR. Prelim. Sur-reply 1–2 (citing Ex. 2044, 5–9); *see id.* at 3.

Further, Patent Owner asserts that a petitioner may not in a petition rely on a claim construction when the petitioner "expressly disagrees" with that construction. Prelim. Resp. 23. As support, Patent Owner cites the following decisions: *Hologic, Inc. v. Enzo Life Sciences, Inc.*, IPR2018-00019, Paper 21 at 6–7 (PTAB Nov. 28, 2018); and *CareFusion Corp. v. Baxter International, Inc.*, IPR2016-01456, Paper 9 at 6–7 (PTAB Feb. 6, 2017). *Id.* at 23–24; *see* Prelim. Sur-reply 3.

(c) Petitioner's Contentions

Petitioner contends that the Petition complies with § 42.104(b)(3) because Petitioner agrees to "adopt the constructions applied in the Samsung IPR as the basis for requesting review" in this proceeding. Prelim. Reply 2–3 (citing Pet. 16); *see id.* at 1 (citing Pet. 16); Pet. 16 & n.3. Also, if the

Board determines that § 112's means-plus-function provision applies to the term "communication manager," Petitioner agrees to "apply any of the proposed constructions in the Samsung IPR." Pet. 35 n.6 (citing Samsung Inst. Dec. 22–24). Additionally, Petitioner identifies a construction for the term "communication manager" from the Samsung IPR. Prelim. Reply 3 (quoting Samsung Pet. 33 n.3). According to Petitioner, the Petition complies with § 42.104(b)(3) for the same reasons that Samsung's petition complies with that rule. *Id.*

Further, Petitioner asserts that "a petitioner is not required to advance a construction it explicitly agrees with, so long as it identifies a construction it agrees to apply in that IPR proceeding." Prelim. Reply 2–3. As support, Petitioner cites the following decisions: *Allen Medical Systems, Inc. v. Mizuho Orthopedic Systems, Inc.*, IPR2022-00919, Paper 12 at 15–18 (PTAB Nov. 2, 2022); and *Western Digital Corp. v. SPEX Technologies, Inc.*, IPR2018-00084, Paper 14 (PTAB Apr. 25, 2018). *Id.* at 3.

Petitioner also asserts that *Hologic* and *CareFusion* are inapposite. Prelim. Reply 2. According to Petitioner, each case involved a petitioner who "did not expressly agree to apply the proposed constructions for the purpose of that IPR." *Id.* (citing *Hologic*, IPR2018-00019, Paper 21 at 5–6; *CareFusion*, IPR2016-01456, Paper 9 at 7).

(d) Analysis

We construe claim terms "using the same claim construction standard" that district courts use to construe claim terms in civil actions under 35 U.S.C. § 282(b). *See* 37 C.F.R. § 42.100(b). Under that standard, claim terms "are given their ordinary and customary meaning, which is the meaning the term would have to a person of ordinary skill in the art at the

time of the invention.” *Power Integrations, Inc. v. Fairchild Semiconductor Int’l, Inc.*, 904 F.3d 965, 971 (Fed. Cir. 2018) (citing *Phillips v. AWH Corp.*, 415 F.3d 1303, 1312–13 (Fed. Cir. 2005) (en banc)).

“If a petitioner believes that a claim term requires an express construction, the petitioner must include a statement identifying a proposed construction of the particular term and where the intrinsic and/or extrinsic evidence supports that meaning.” PTAB Consolidated Trial Practice Guide at 44 (Nov. 2019) (“CTPG”).³ “On the other hand, a petitioner may include a statement that the claim terms require no express construction.” *Id.*

In the petition in the Samsung IPR, Samsung contended that “the Board does not need to construe any claim term for purposes of evaluating the prior art,” i.e., that “the claim terms require no express construction.” Samsung Pet. 15. In the Samsung IPR Institution Decision, we determined that “no claim term requires an explicit construction to decide whether [Samsung] satisfies the ‘reasonable likelihood’ standard for instituting trial.” Samsung Inst. Dec. 23.

Petitioner agrees to “adopt the constructions applied in the Samsung IPR as the basis for requesting review” in this proceeding. Prelim. Reply 2–3 (citing Pet. 16); *see id.* at 1 (citing Pet. 16); Pet. 16 & n.3. Thus, like Samsung in the Samsung IPR, Petitioner indicates that “the claim terms require no express construction.” *See* Pet. 16 & n.3; Prelim. Reply 1–3; Samsung Pet. 15; CTPG at 44. Further, if the Board determines that § 112’s means-plus-function provision applies to the term “communication

³ Available at <https://www.uspto.gov/TrialPracticeGuideConsolidated>.

manager,” Petitioner agrees to “apply any of the proposed constructions in the Samsung IPR.” Pet. 35 n.6.

Hence, under the circumstances here, we disagree with Patent Owner that the Board’s rules regarding a petition’s content warrant denying institution. *See* 37 C.F.R. § 42.104(b)(3).

As for the *Hologic* and *CareFusion* decisions cited by Patent Owner, neither decision stands for the proposition that a party in an Office proceeding must seek to construe a term before the Board that it sought to construe before the district court. *See* Prelim. Resp. 23–24; Prelim. Sur-reply 3. In both *Hologic* and *CareFusion*, the Board decided that a party in an Office proceeding may not “expressly disagree” with a claim-construction position in the proceeding and still advance the disagreed-with position in the proceeding. *See Hologic*, IPR2018-00019, Paper 21 at 2–7; *CareFusion*, IPR2016-01456, Paper 9 at 6–7; *see also Allen Medical*, IPR2022-00919, Paper 12 at 15–18 (distinguishing *Hologic* and *CareFusion* and explaining that “[a] petitioner does not run afoul of 37 C.F.R. § 42.104(b)(3) merely by asserting in a petition a claim construction that differs from a construction the petitioner asserts in a parallel proceeding in a district court”).

Unlike the situations in *Hologic* and *CareFusion*, Petitioner does not seek to have the Board provide a construction for a term that differs from the construction Petitioner offered to the district court, nor does Petitioner “expressly disagree” with a claim-construction position in this proceeding and still advance the disagreed-with position in this proceeding. *See, e.g.*, Pet. 16 & n.3, 32 n.5, 36 n.6; Prelim. Reply 1–3. Moreover, neither *Hologic* nor *CareFusion* is precedential.

Patent Owner does not contend that judicial estoppel prevents Petitioner from proposing a claim construction that differs from a claim construction proposed in a parallel civil action.⁴ *See* Prelim. Resp. 22–24; Prelim. Sur-reply 1–3. Nor does Patent Owner contend that some other type of estoppel prevents Petitioner from doing so.

4. DRAKE’S DISCLOSURE OF THE CLAIMED “FIRST MODULE”

(a) Patent Owner’s Contentions

Patent Owner contends that Petitioner “failed to identify with specificity which disclosure in Drake” corresponds to the claimed “first module.” Prelim. Resp. 29. As support, Patent Owner quotes Petitioner’s assertions regarding limitations 1.d and 6.a as follows:⁵

- (1) “Drake likewise describes ‘connections’ between source and target stations (i.e., first and second processing modules)” for limitation 1.d; and
- (2) “the application in the source station (i.e., first module) communicates this request to a QoS requestor manager

⁴ “Judicial estoppel is an equitable doctrine that prevents a litigant from taking a litigation position inconsistent with one successfully asserted in an earlier court proceeding.” *Egenera, Inc. v. Cisco Sys., Inc.*, 972 F.3d 1367, 1378 (Fed. Cir. 2020). Whether judicial estoppel applies depends on: (1) whether a party’s earlier and later positions are “clearly inconsistent”—that is, “mutually exclusive”; (2) whether the party “succeeded in persuading a court to accept” the earlier position; and (3) whether the party would “derive an unfair advantage or impose an unfair detriment” on the other side if not estopped. *Id.* (quoting *New Hampshire v. Maine*, 532 U.S. 742, 750–51 (2001)).

⁵ Regarding claim 1’s limitations, Petitioner explains that it filed “substantially the same petition as originally filed by Samsung” and that it addresses now-disclaimed claims only because “those claims contain elements that are repeated in later non-disclaimed claims.” Pet. 1 n.1; *see* Mot. 5.

(i.e., communication manager) for subsequent transmission to a QoS allocator” for limitation 6.a.

Id. at 28–29 (emphases omitted) (quoting Pet. 27, 41). According to Patent Owner, Petitioner identifies Drake’s source station 10 as the claimed “first module” for limitation 1.d and inconsistently identifies application 11 in source station 10 as the claimed “first module” for limitation 6.a. *Id.* at 28–29, 31.

Additionally, Patent Owner asserts that application 11 in source station 10 “cannot be the claimed first module because it is a software application executing on the source station 10 and not a ‘module’ as claimed” in the ’449 patent. Prelim. Resp. 31. According to Patent Owner, the claimed “first module” is “a hardware circuit, not a software application.” *Id.* (citing Ex. 1001, 1:15–17, 1:30–34, 4:58–62, 8:43–45, 9:42–46).

Further, Patent Owner asserts that if source station 10 is the claimed “first module,” then source station 10 cannot “issu[e] a request for a connection . . . to a communication manager” according to limitation 10.a because (1) Petitioner identifies QoS requestor manager 12 in source station 10 as the claimed “communication manager” and (2) source station 10 as the claimed “first module” cannot “issue a request” to itself. Prelim. Resp. 30.

(b) Analysis

We disagree with Patent Owner that Petitioner “failed to identify with specificity which disclosure in Drake” corresponds to the claimed “first module.” *See* Prelim. Resp. 29. Petitioner consistently identifies Drake’s source station 10 as the claimed “first module.” *See* Pet. 27, 32, 40–41, 59.

As examples, Petitioner contends that:

- (1) “Drake likewise describes ‘connections’ between source and target stations (i.e., first and second processing modules), which it also refers to as ‘QoS connections,’ ‘QoS streams’ and ‘QoS data streams’”;
- (2) “Drake likewise describes ‘connections’ between an application in a source station (i.e., first module) and a target station (i.e., second module)”;
- (3) “Drake likewise describes communications in the ‘forward direction’ (i.e., outgoing messages) and in the ‘backward direction’ (i.e., return messages) between source and target stations (i.e., first and second modules).”

Pet. 27, 32, 59 (emphases omitted).

Also, we disagree with Patent Owner that Petitioner identifies application 11 in source station 10 as the claimed “first module” for limitation 6.a. *See* Prelim. Resp. 28–29. Limitation 6.a reads as follows: “wherein said first module (M; I) is adapted to issue a request (REQ) for a connection with at least one of said second modules to said communication manager (CM).” Ex. 1001, 18:60–63. Petitioner explains how the constituents of Drake’s QoS management system satisfy limitation 6.a as follows: “Drake further describes that the application in the source station (i.e., first module) communicates this request to a QoS requestor manager (i.e., communication manager) for subsequent transmission to a QoS allocator.” Pet. 41 (emphases omitted). Petitioner’s explanation indicates that Petitioner identifies source station 10 as the claimed “first module” for limitation 6.a and identifies application 11 as a component in the claimed “first module” involved in “issu[ing] a request.” *Id.*; *see id.* at 27, 32, 40, 59.

As for Patent Owner’s assertion that source station 10 as the claimed “first module” cannot “issue a request” to itself, the challenged claims do not specify what component in the “first module” issues a request to the claimed “communication manager.” *See* Ex. 1001, 18:49–51, 18:60–19:5, 19:17–20:27; Prelim. Resp. 30. Nor do the challenged claims preclude the claimed “communication manager” from residing in the claimed “first module.” *See* Ex. 1001, 18:49–51, 18:60–19:5, 19:17–20:27.

5. GOOSENS2003’S ALLEGED FAILURE TO DISCLOSE THE CLAIMED
“COMMUNICATION MANAGER” AND THE CLAIMED “RESOURCE MANAGER”

(a) Background

Claim 10 recites “the first module issuing a request for a connection with the second module to a communication manager, wherein the request comprises desired connection properties associated with the sets of communication channels.” Ex. 1001, 19:32–35 (limitation 10.a). Claim 10 also recites “the communication manager forwarding the request to a resource manager.” *Id.* at 19:36–37 (limitation 10.b).

(b) Patent Owner’s Contentions

Patent Owner contends that Petitioner “concedes that Goossens2003 does not disclose the claimed resource manager.” Prelim. Resp. 45. As support, Patent Owner quotes Petitioner’s assertion regarding limitation 1.c as follows: “Goossens2003 ‘does not describe a specific component or mechanism for tracking resource usage within the NOC or for determining the availability of the resources required for a requested connection.’” *Id.* (quoting Pet. 57).

Further, Patent Owner asserts that if “there is no resource manager in Goossens2003, as Petitioner concedes, then there is necessarily no

communication manager” as required by the challenged claims. Prelim. Resp. 46.

(b) Analysis

Whether Goossens2003 fails to disclose the claimed “communication manager” and the claimed “resource manager” does not matter because Petitioner relies on the combined disclosures in Goossens2003 and Drake to teach limitations 10.a and 10.b. *See, e.g.*, Pet. 57–58, 62–63, 69.

In particular, Petitioner asserts that Drake discloses the “communication manager” required by limitation 10.a because Drake’s QoS management system includes a QoS requestor manager that:

- (1) is “associated with” a source station;
- (2) manages communications between modules by “assembl[ing] a request to reserve a QoS connection for a multi-media data stream . . . between source station 10 and target station 29”;
- (3) forwards a request to reserve a QoS connection to a QoS allocator;
- (4) may accept or reject connections established by the QoS allocator based on the specified QoS parameters; and
- (5) may request the release of reserved connections and resources.

Pet. 35–37 (alterations by Petitioner) (quoting Ex. 1006, 4:35–37); *see id.* at 41, 65–66.

Further, for limitation 10.a Petitioner asserts that Goossens2003 discloses that the “IPs negotiate with network interfaces to obtain connections with certain properties.” Pet. 65 (quoting Ex. 1007, 77);⁶ *see id.*

⁶ For Exhibit 1007 (Goossens2003), we follow Petitioner’s practice and cite to the page numbers appearing in the publication.

at 69. Petitioner asserts that when the “IPs make a request for a connection, the desired communication properties and level of service ‘must be stated explicitly.’” *Id.* at 65 (quoting Ex. 1007, 67). Petitioner also asserts that an ordinarily skilled artisan “would have understood the requests issued by the IPs comprise desired connection properties.” *Id.* (citing Ex. 1003 ¶ 194).

Petitioner contends that Goossens2003 teaches “resource management.” Pet. 57. Specifically, Petitioner asserts that “Goossens2003 explains the implementation of connections in a NOC requires ‘resource management,’ but does not describe a specific component or mechanism for tracking resource usage within the NOC or for determining the availability of the resources required for a requested connection.” *Id.*

Petitioner asserts that Drake discloses the “resource manager” required by limitation 10.b because Drake’s QoS management system includes QoS allocator 20 that “receives requests for connections with certain properties and examines the resources of the network to determine whether those requests can be satisfied.” Pet. 24 (citing Ex. 1003 ¶ 91; Ex. 1006, 2:14–21, 2:65–3:6, 4:22–25, 4:49–54, 4:66–5:14, 10:41–11:48, code (57), Figs. 1, 4–5).

Further, for limitation 10.b Petitioner asserts that Goossens2003 discloses:

- (1) connections that “comprise ‘request’ and ‘response’ channels,”; and
- (2) “these channels have ‘connection properties,’ including flow control and throughput guarantees, that ‘can be independently configured.’”

Pet. 60 (quoting Ex. 1007, 72, 74) (citing Ex. 1003 ¶ 178); *see id.* at 66, 69. According to Petitioner, the ’449 patent discloses the “same functionality”

when explaining that “the connection properties of the request and response parts of a connection can be configured independently for all of throughput, latency and jitter.” *Id.* at 60 (quoting Ex. 1001, 11:20–22).

Because Petitioner relies on the combined disclosures in Goossens2003 and Drake to teach limitations 10.a and 10.b, the alleged absence of the claimed “communication manager” and the claimed “resource manager” in Goossens2003 does not negate obviousness. *See* Pet. 24, 35–37, 40–42, 60, 65–66, 69; Prelim. Resp. 45. Where obviousness rests on a combination of references, a patentee cannot establish nonobviousness by attacking the references individually. *See In re Merck & Co.*, 800 F.2d 1091, 1097 (Fed. Cir. 1986). Additionally, as explained in the Samsung IPR Institution Decision, “Petitioner establishes sufficiently that the combined disclosures in Goossens2003 and Drake teach limitations 10.a and 10.b.” Samsung Inst. Dec. 78–79.

6. CONCLUSION

For the reasons explained in the Samsung IPR Institution Decision and the reasons discussed above, we consider Patent Owner’s arguments against institution unavailing. *See* Prelim. Resp. 3, 22–52; Prelim. Sur-reply 1–3; Samsung Inst. Dec. 39–67, 72–86; *supra* §§ III.B.2–III.B.5. Because Petitioner presents substantively identical challenges to claims 2, 6, and 9–16 in the ’449 patent based on the same prior art and the same unpatentability theories as Samsung presents in the Samsung IPR, the Petition “warrants the institution of an inter partes review under section 314.” *See* Samsung Pet. 15–68; Samsung Inst. Dec. 17–87; Pet. 16–71; 35 U.S.C. § 315(c).

C. Discretionary Denial Based on a Follow-On Petition

1. BACKGROUND

Under § 314(a), the Director possesses “broad discretion” in deciding whether to institute an *inter partes* review. *See* 35 U.S.C. § 314(a); *Saint Regis Mohawk Tribe v. Mylan Pharm. Inc.*, 896 F.3d 1322, 1327 (Fed. Cir. 2018). The Director is “permitted, but never compelled,” to institute an *inter partes* review. *Harmonic Inc. v. Avid Tech., Inc.*, 815 F.3d 1356, 1367 (Fed. Cir. 2016). The Board decides whether to institute an *inter partes* review on the Director’s behalf. 37 C.F.R. § 42.4(a).

Determining “whether the joinder applicant’s petition for IPR ‘warrants’ institution under § 314” may include an analysis of “the Director’s discretionary authority of § 314(a).” *Apple Inc. v. Uniloc 2017 LLC*, IPR2020-00854, Paper 9 at 5 (PTAB Oct. 28, 2020) (precedential) (“*Uniloc*”) (quoting *Facebook*, 973 F.3d at 1332); *see id.* at 8, 13.

When deciding whether to exercise discretion under § 314(a) to deny institution based on a follow-on petition, the Board has identified the following nonexclusive factors to consider:

- (1) whether the same petitioner previously filed a petition directed to the same claims of the same patent;
- (2) whether at the time of filing of the first petition the petitioner knew of the prior art asserted in the second petition or should have known of it;
- (3) whether at the time of filing of the second petition the petitioner already received the patent owner’s preliminary response to the first petition or received the Board’s decision on whether to institute review in the first petition;

- (4) the length of time that elapsed between the time the petitioner learned of the prior art asserted in the second petition and the filing of the second petition;
- (5) whether the petitioner provides adequate explanation for the time elapsed between the filings of multiple petitions directed to the same claims of the same patent;
- (6) the finite resources of the Board; and
- (7) the requirement under 35 U.S.C. § 316(a)(11) to issue a final determination not later than 1 year after the date on which the Director notices institution of review.

Gen. Plastic Indus. Co. v. Canon Kabushiki Kaisha, IPR2016-01357, Paper 19 at 9–10, 16 (PTAB Sept. 6, 2017) (precedential as to § II.B.4.i) (“*General Plastic*”). The *General Plastic* factors “provide a useful framework for analyzing” a proceeding where “a different petitioner file[s] a petition challenging a patent that had been challenged already by previous petitions.” *NetApp Inc. v. Realtime Data LLC*, IPR2017-01195, Paper 9 at 10 (PTAB Oct. 12, 2017).

Additionally, “when different petitioners challenge the same patent,” the Board has considered “any relationship between those petitioners when weighing the *General Plastic* factors.” *Valve Corp. v. Elec. Scripting Prods., Inc.*, IPR2019-00062, Paper 11 at 9 (PTAB Apr. 2, 2019) (precedential) (“*Valve*”).

Patent Owner argues that the Board should exercise discretion under § 314(a) to deny institution because the *General Plastic* factors favor discretionary denial. See Mot. Resp. 11–14. Petitioner argues that “*General Plastic* applies to serial/follow-on petitions, not copycat petitions like this one.” Mot. Reply 5 (citing *eBay, Inc. v. Lexos Media IP, LLC*, IPR2024-00336, Paper 11 at 13 (PTAB Feb. 23, 2024)). Petitioner also argues that,

insofar as applicable, the *General Plastic* factors do not favor discretionary denial. *Id.* For the reasons explained below, we agree with Petitioner that, insofar as applicable, the *General Plastic* factors do not favor discretionary denial.

2. FACTOR (1): PREVIOUS PETITION

For factor (1), Patent Owner acknowledges that Petitioner did not previously file a petition requesting an *inter partes* review of any claim in the '449 patent. Mot. Resp. 12. Patent Owner asserts, however, that factor (1) favors discretionary denial because Petitioner has a “significant relationship” with Samsung. *Id.* at 12–13 (citing *Valve*, IPR2019-00062, Paper 11 at 10). According to Patent Owner, Petitioner has a “significant relationship” with Samsung because Petitioner and Samsung were “both defendants in related district court litigation” and co-petitioners in the following Board proceedings: IPR2024-00343 (Patent 7,594,052 B2) and IPR2024-00355 (Patent 8,072,893 B2). *Id.*; *see supra* § II.B.

Petitioner asserts that factor (1) does not favor discretionary denial because Petitioner did not previously file a petition requesting an *inter partes* review of any claim in the '449 patent and “there is no ‘potential for abuse of the review process by repeated attacks on patents.’” Mot. 3, 8 (quoting *Uniloc*, IPR2020-00854, Paper 9 at 5). Petitioner also asserts that factor (1) does not favor discretionary denial because Petitioner and Samsung are “defendants in separate lawsuits in separate districts accused of infringing different claim sets” instead of co-defendants in the same lawsuit. Mot. Reply 5.

Under the circumstances here, factor (1) does not favor discretionary denial. In *Valve*, the Board noted that the petitioner Valve and a previous

petitioner HTC “were co-defendants in the District Court litigation and were accused of infringing the [challenged] patent based on HTC’s VIVE devices that incorporate technology licensed from Valve.” *Valve*, IPR2019-00062, Paper 11 at 1, 10. Based on those particular facts, the Board determined that there was a “significant relationship” between Valve and HTC “with respect to Patent Owner’s assertion of” the challenged patent. *Id.*

Here, in contrast to *Valve*, nothing in the current record indicates that there is a “significant relationship” between Petitioner and Samsung “with respect to Patent Owner’s assertion of” the ’449 patent. Patent Owner filed a complaint for patent infringement against Samsung in the Eastern District of Texas and filed a complaint for patent infringement against Petitioner in the Western District of Texas. Pet. 74; Paper 6, 2; Prelim. Resp. 2; *see supra* § II.B. Patent Owner does not allege any connection between the accused products in those two infringement actions. *See, e.g.*, Mot. Resp. 11–14.

That Petitioner and Samsung jointly filed petitions in IPR2024-00343 and IPR2024-00355 challenging claims in other patents does not show a “significant relationship” between Petitioner and Samsung “with respect to Patent Owner’s assertion of” the ’449 patent.

Moreover, even if Petitioner and Samsung were co-defendants in the same lawsuit, “[c]ourt-ordered pretrial coordination between parties having different accused products does not present a ‘significant relationship’ vis-à-vis the challenged patent that justifies application of a *General Plastic* analysis, unless there are other relevant or extenuating facts or circumstances.” *Ford Motor Co. v. Neo Wireless LLC*, IPR2023-00763, Paper 28 at 11 (Vidal Mar. 22, 2024) (Director decision). Here, nothing in

the current record indicates that “there are other relevant or extenuating facts or circumstances” creating a “significant relationship” between Petitioner and Samsung for purposes of the *General Plastic-Valve* analysis.

That Petitioner copied Samsung’s petition to present substantively identical challenges to claims 2, 6, and 9–16 in the ’449 patent does not create a “significant relationship” between Petitioner and Samsung for purposes of the *General Plastic-Valve* analysis. Copying a previously instituted petition is “common in the joinder context” and “an accepted approach” because it is an efficient way to satisfy § 315(c)’s requirement to file a petition that “warrants the institution of an inter partes review.” *Expedia, Inc. v. Express Mobile, Inc.*, IPR2022-00785, Paper 16 at 7–9 (PTAB Sept. 27, 2022).

“*General Plastic* has not been extended to any cases in which the first and second petitioners *do not have* a significant relationship.” *Videndum Prod. Sols., Inc. v. Rotolight Ltd.*, IPR2023-01218, Paper 12 at 6 (Vidal April 19, 2024) (Director decision) (emphasis in original) (citing *Ford*, IPR2023-00763, Paper 28 at 11). Under the circumstances here, Patent Owner does not show that Petitioner and Samsung have a “significant relationship” for purposes of the *General Plastic-Valve* analysis.

For these reasons, factor (1) does not favor discretionary denial.

3. FACTOR (2): KNOWLEDGE OF THE PRIOR ART

Patent Owner asserts that factor (2) favors discretionary denial because Petitioner has known about the asserted references at least since the date Petitioner served its invalidity contentions in the Qualcomm litigation, i.e., September 22, 2023. Mot. Resp. 13 (citing Ex. 2066).

Petitioner asserts that factor (2) does not favor discretionary denial because its invalidity contentions in the Qualcomm litigation lack any reference to Drake. Mot. Reply 5.

Under the circumstances here, factor (2) does not favor discretionary denial. Although Petitioner’s invalidity contentions in the Qualcomm litigation cite Goossens2002 and Goossens2003, the contentions do not cite Drake. *See* Ex. 2066, 12–121.⁷ Patent Owner does not show that Petitioner knew about Drake before the petition in the Samsung IPR was filed, i.e., before December 18, 2023. *See* Mot. Resp. 13.

4. FACTOR (3): ROADMAPING CONCERNS

Patent Owner asserts that factor (3) favors discretionary denial because Petitioner “had the benefit of” Patent Owner’s preliminary response in the Samsung IPR and the Samsung IPR Institution Decision. Mot. Resp. 13.

Petitioner asserts that factor (3) is “inapplicable.” Mot. Reply 5.

Under the circumstances here, factor (3) does not favor discretionary denial. Relevant to factor (3), the Board in *General Plastic* discussed the “potential for abuse” due to multiple, staggered petitions “challenging the same patent and same claims.” *Gen. Plastic*, IPR2016-01357, Paper 19 at 17. The Board said, “The absence of any restrictions on follow-on petitions would allow petitioners the opportunity to strategically stage their prior art and arguments in multiple petitions, using our decisions as a

⁷ For Exhibit 2066 (Qualcomm Incorporated, Qualcomm Technologies, Inc., and Arteris, Inc.’s Invalidity Contentions), we cite to the page numbers appearing in the document instead of page number applied to the exhibit by Patent Owner.

roadmap, until a ground is found that results in the grant of review.” *Id.* But roadmapping concerns are “minimized” when “a petitioner files a later petition that raises unpatentability challenges substantially overlapping with those” in an earlier petition and “the later petition is not refined based on lessons learned from later developments.” *Code200, UAB v. Bright Data Ltd.*, IPR2022-00861, Paper 18 at 5 (Vidal Aug. 23, 2022) (Director decision) (precedential) (“*Code200*”); *see Expedia*, IPR2022-00785, Paper 16 at 9.

Here, Petitioner presents substantively identical challenges to claims 2, 6, and 9–16 in the ’449 patent based on the same prior art and the same unpatentability theories as Samsung presents in the Samsung IPR. *Compare* Pet. 16–71, *with* Samsung Pet. 15–68; *see* Mot. Resp. 1. And as discussed above, copying a previously instituted petition is “common in the joinder context” and “an accepted approach.” *Expedia*, IPR2022-00785, Paper 16 at 7–9; *see supra* § III.C.1. Further, any differences between the Petition and Samsung’s petition did not result from roadmapping to correct a deficiency in Samsung’s petition because the Board instituted review in the Samsung IPR. *See Code200*, IPR2022-00861, Paper 18 at 5; *Gen. Plastic*, IPR2016-01357, Paper 19 at 17; Samsung Inst. Dec. 87.

For these reasons, factor (3) does not favor discretionary denial.

5. FACTORS (4) AND (5): DELAY AND EXPLANATION

Patent Owner asserts that factors (4) and (5) favor discretionary denial because Petitioner has known about the asserted references at least since the date Petitioner served its invalidity contentions in the Qualcomm litigation, i.e., September 22, 2023. Mot. Resp. 13. Patent Owner also asserts that Petitioner provides no explanation for failing to (1) “join Samsung as a

co-petitioner in the Samsung IPR” or (2) “file its own petition prior to being time-barred.” *Id.* at 1, 13.

Petitioner asserts that factors (4) and (5) do not favor discretionary denial because its invalidity contentions in the Qualcomm litigation lack any reference to Drake. Mot. Reply 5. Additionally, Petitioner explains that it “had no involvement in Samsung’s decision to file an IPR against the ’449 patent.” *Id.* at 3. Petitioner also explains that it filed the Petition and the Motion for Joinder “after the Board instituted review” in the Samsung IPR because “the rules do not allow the Director to grant joinder until after institution.” *Id.*

Under the circumstances here, factors (4) and (5) do not favor discretionary denial. Although Petitioner’s invalidity contentions in the Qualcomm litigation cite Goossens2002 and Goossens2003, the contentions do not cite Drake. *See* Ex. 2066, 12–121. Patent Owner does not show that Petitioner knew about Drake before the petition in the Samsung IPR was filed, i.e., before December 18, 2023. *See* Mot. Resp. 13. And after December 23, 2023, § 315(b)’s one-year time bar prevented Petitioner from filing a petition challenging claims in the ’449 patent until we instituted review in the Samsung IPR. *See* 35 U.S.C. § 315(b)–(c); 37 C.F.R. §§ 42.101(b), 42.122(b); Prelim. Resp. 3; Mot. Resp. 2.

As for Patent Owner’s assertion that Petitioner provides no explanation for failing to “join Samsung as a co-petitioner in the Samsung IPR,” Petitioner explains that it “had no involvement in Samsung’s decision to file an IPR against the ’449 patent.” *See* Mot. Resp. 1, 13; Mot. Reply 3.

6. FACTORS (6) AND (7): IMPACT ON BOARD OPERATIONS

Patent Owner asserts that factor (6) favors discretionary denial because granting the Petition and allowing joinder to the Samsung IPR will “needlessly expend the finite resources of the Board.” Mot. Resp. 13. According to Patent Owner, it and Samsung have “reached a settlement,” and the Samsung IPR “will be terminated unless [Petitioner] is allowed to join” the Samsung IPR. *Id.* at 1–2, 7, 13. Further, Patent Owner asserts that the Board’s finite resources “should not be used for a time-barred petitioner that deliberately chose not to file a petition challenging the ’449 patent.” *Id.* Patent Owner also asserts that factor (7) “appears neutral.” *Id.* at 14.

Petitioner asserts that factors (6) and (7) do not favor discretionary denial. Mot. Reply 5. Petitioner explains that Patent Owner “currently must respond to one IPR concerning the ’449 patent, and by joining [Petitioner] to the existing Samsung IPR” Patent Owner “would continue to respond to only one IPR.” Mot. 8.

For factor (6), joining Petitioner to the Samsung IPR should not adversely impact the Board’s resources. The Board contemplated using its resources for the Samsung IPR. If Samsung is terminated from the Samsung IPR due to a settlement with Patent Owner and the Samsung IPR proceeds because Petitioner is allowed to join, that does not change the contemplated use of the Board’s resources. Moreover, “the Board’s mission ‘to improve patent quality and restore confidence in the presumption of validity that comes with issued patents’ outweighs the impact on Board resources needed to evaluate the merits of a petition.” *Code200*, IPR2022-00861, Paper 18 at 6 (quoting *Cuozzo Speed Techs., LLC v. Lee*, 579 U.S. 261, 272 (2016)).

For factor (7), joinder should require little, if any, additional Board effort and should not affect when a final determination issues.

For these reasons, factors (6) and (7) do not favor discretionary denial.

7. SUMMARY

In summary, after analyzing the *General Plastic* factors, we determine that, on balance, the factors do not favor denying an *inter partes* review. Hence, we decline to exercise our discretion under § 314(a) to deny institution.

D. Whether to Grant Petitioner’s Motion for Joinder

1. INTRODUCTION

As the movant, Petitioner “has the burden of proof to establish that it is entitled to the requested relief.” 37 C.F.R. § 42.20(c); *see* 37 C.F.R. § 42.122(b).

A joinder motion should:

- (1) “set forth the reasons joinder is appropriate”;
- (2) “identify any new grounds of unpatentability asserted in the petition”; and
- (3) “explain what impact (if any) joinder would have on the trial schedule for the existing review.”

See, e.g., AT&T Corp. v. Dali Wireless Inc., IPR2023-00818, Paper 8 at 8 (PTAB Aug. 14, 2023) (citing *Kyocera Corp. v. SoftView LLC*, IPR2013-00004, Paper 15 at 4 (PTAB Apr. 24, 2013)); *Hyundai Motor Am. v. StratosAudio, Inc.*, IPR2022-00224, Paper 11 at 7 (PTAB June 2, 2022) (citing *Kyocera*).

2. THE REASONS JOINDER IS APPROPRIATE

(a) Petitioner's Arguments Why Joinder Is Appropriate

Regarding timeliness, Petitioner asserts that it timely filed the Petition and the Motion for Joinder “within one month after the institution date of the Samsung IPR.” Mot. 6 (citing 37 C.F.R. § 42.122(b)); *see* Mot. Reply 3, 5.

Regarding the substance of the patentability challenge, Petitioner asserts that “the Petition challenges the same claims, asserts the same grounds, and relies on the same evidence for unpatentability presented in the Samsung IPR.” Mot. 7, 9; *see id.* at 1, 4. Petitioner also asserts that “the same expert, Dr. Todd Mowry, has submitted the same supporting declaration in both IPRs.” *Id.* at 7; *see id.* at 1, 4, 9. Therefore, according to Petitioner, “joinder will not impact the schedule of the pending Samsung IPR and will further promote efficiency by resolving both challenges in a single proceeding.” *Id.* at 6.

Additionally, Petitioner contends that joinder to the Samsung IPR will:

- (1) “enable an efficient and appropriate use of the review process”;
- (2) “ensure a just, speedy, and efficient resolution of the meritorious challenge to the validity of claims that [Patent Owner] is asserting against various defendants”;
and
- (3) “promote the public interest in ensuring the full adjudication of the meritorious challenge to claims of the ’449 patent raised by the Samsung IPR.”

Mot. 7–8. Petitioner explains that it has been accused of infringing the ’449 patent and that it seeks joinder to the Samsung IPR to “ensure a party accused of infringing the ’449 patent remains a party to this IPR if

Samsung’s participation in the instituted Samsung IPR ends prior to that IPR reaching completion.” *Id.* at 3, 7.

Petitioner contends that joinder to the Samsung IPR will not prejudice Patent Owner because “so long as Samsung remains in the proceeding, joinder will not add any new substantive issues, will not delay the schedule, will not burden deponents, and will not needlessly increase filings.” Mot. 2. Petitioner contends that denying joinder to the Samsung IPR will prejudice Petitioner because its interests “may not be adequately protected in the Samsung IPR, particularly if Samsung ceases to participate in the Samsung IPR prior to its resolution.” *Id.*

Petitioner also contends that “there is no ‘potential for abuse of the review process by repeated attacks on patents’” because it did not previously file a petition requesting an *inter partes* review of any claim in the ’449 patent. Mot. 3, 8 (quoting *Uniloc*, IPR2020-00854, Paper 9 at 5).

(b) Patent Owner’s Arguments Why Joinder Is Not Appropriate

Patent Owner disputes that joinder is appropriate for several reasons. *See* Mot. Resp. 1–2, 5–10. First, Patent Owner asserts that the Petition “is time-barred under 35 U.S.C. § 315(b).” *Id.* at 5; *see id.* at 1; *supra* § III.B.2(a).

Second, citing *Proppant Express Investments, LLC v. Oren Technologies, LLC*, IPR2018-00914, Paper 38 (PTAB Mar. 13, 2019), Patent Owner asserts that fairness does not require joinder to the Samsung IPR because Patent Owner has not “taken a position in district court, such as asserting new claims, that would prejudice [Petitioner] if joinder was denied.” Mot. Resp. 6–7; *see id.* at 5. Patent Owner asserts that fairness warrants denying joinder to the Samsung IPR because Petitioner

“presumably knew that Samsung was preparing a petition” challenging claims in the ’449 patent but “chose not to join that petition.” *Id.* at 7 (citing *Proppant Express*, IPR2018-00914, Paper 38 at 20).

Third, Patent Owner asserts that denying joinder to the Samsung IPR will not unduly prejudice Petitioner because denying joinder will not affect Petitioner’s “ability to pursue an invalidity defense” in the Qualcomm litigation. *See* Mot. Resp. 7–8. According to Patent Owner, Petitioner “could have protected its interests by joining Samsung as a co-petitioner as it did” in IPR2024-00343 and IPR2024-00355. *Id.* at 2, 8.

Fourth, Patent Owner asserts that it and Samsung have “reached a settlement” and Petitioner “cannot assume an ‘understudy’ role because Samsung will be terminated from the Samsung IPR.” Mot. Resp. 2, 6–7; *see id.* at 1–2, 10.

Fifth, Patent Owner asserts that joinder to the Samsung IPR will “unduly prejudice” Patent Owner by (1) “forcing it to proceed through an IPR” for the ’449 patent “after it settled with the only party that filed a timely petition” and (2) causing it “to incur significant costs.” Mot. Resp. 8–9; *see id.* at 10. According to Patent Owner, joinder to the Samsung IPR will undermine its “bargained for exchange by subjecting it to the same cost and uncertainty the settlement sought to avoid.” *Id.* at 8–9.

Further, Patent Owner asserts that Petitioner’s “argument that joinder will not prejudice” Patent Owner is “expressly conditioned on ‘Samsung remain[ing] in the proceeding.’” Mot. Resp. 10 (alteration by Patent Owner) (quoting Mot. 2). Patent Owner asserts that Petitioner “knows that Samsung will not remain in the proceeding and does not allege that [Patent Owner] would not be prejudiced in that case.” *Id.* (citing Mot. 2 n.1).

Sixth, Patent Owner asserts that joinder to the Samsung IPR will prejudice Samsung because Patent Owner “will need to schedule depositions of Samsung’s declarants” before filing a response to Samsung’s petition, thus causing Samsung “to incur significant costs.” Mot. Resp. 9.

(c) Analysis

For the reasons discussed above, we agree with Petitioner that it timely filed the Petition and the Motion for Joinder “within one month after the institution date of the Samsung IPR.” *See* 37 C.F.R. § 42.122(b); Mot. 6; Mot. Reply 3, 5; *supra* § III.B.2(c).

We agree with Petitioner that “the Petition challenges the same claims, asserts the same grounds, and relies on the same evidence for unpatentability presented in the Samsung IPR.” *Compare* Pet. 16–71, with Samsung Pet. 15–68; *see* Mot. 7, 9. Patent Owner concedes that Petitioner filed “a carbon copy of the Samsung’s petition and evidence.” Mot. Resp. 1. Thus, the Petition raises no new issues. *See infra* § III.D.3.

We also agree with Petitioner that joinder to the Samsung IPR will result in “a just, speedy, and efficient resolution” of Petitioner’s challenge. *See* Mot. 7. The Scheduling Order in the Samsung IPR already specifies a schedule, including a date for oral argument. IPR2024-00338, Paper 11 at 12.

We disagree with Patent Owner that fairness warrants denying joinder to the Samsung IPR. *See* Mot. Resp. 5–7. Patent Owner bases its fairness arguments on the Precedential Opinion Panel (“POP”) decision in *Proppant*

Express. See *id.* at 5, 7. But that decision has been de-designated as precedential.⁸

Moreover, the circumstances in *Proppant Express* differ materially from the circumstances here. There, the petitioner (1) filed a first petition that resulted in an instituted proceeding for a patent, (2) filed a second petition challenging an additional claim in the patent after § 315(b)'s one-year deadline, and (3) moved to join the new proceeding to the instituted proceeding. *Proppant Express*, IPR2018-00914, Paper 38 at 2–3. Addressing that situation, the POP noted that “when an otherwise time-barred petitioner requests same party and/or issue joinder, the Board will exercise this discretion only in limited circumstances,” namely, “where fairness requires it and to avoid undue prejudice to a party.” *Id.* at 19; see *id.* at 3, 11, 16.

Here, unlike the petitioner in *Proppant Express*, Petitioner does not request “same party and/or issue joinder.” See Mot. 6–11. Further, in *Facebook* the Federal Circuit decided that the POP’s “conclusion, which allowed same-party joinder, is incorrect.” *Facebook*, 973 F.3d at 1335.

As for Patent Owner’s assertion that the Petition “is time-barred under 35 U.S.C. § 315(b),” we disagree for the reasons discussed above. See Mot. Resp. 5; *supra* § III.B.2(c).

As for Patent Owner’s assertion that Petitioner “presumably knew that Samsung was preparing a petition” challenging claims in the ’449 patent but “chose not to join that petition,” Petitioner explains that it “had no

⁸ See <https://www.uspto.gov/patents/ptab/decisions-and-opinions/precedential>.

involvement in Samsung's decision to file an IPR against the '449 patent." See Mot. Resp. 7; Mot. Reply 3.

As for Patent Owner's assertions that Petitioner "cannot assume an 'understudy' role because Samsung will be terminated from the Samsung IPR" and continuing the Samsung IPR with Petitioner as a party instead of Samsung will "unduly prejudice" Patent Owner, we disagree. Mot. Resp. 6, 8. Continuing the Samsung IPR with Petitioner as a party instead of Samsung will result in a detriment to Patent Owner no different than any other patentee who participates in an *inter partes* review. Continuing the Samsung IPR with Petitioner as a party instead of Samsung does not amount to "undue prejudice." Hence, even if Petitioner's "argument that joinder will not prejudice" Patent Owner is "expressly conditioned on 'Samsung remain[ing] in the proceeding,'" as Patent Owner asserts, "undue prejudice" does not constitute a reason for denying joinder. See Mot. Resp. 10.

As for Patent Owner's assertion that joinder to the Samsung IPR will undermine its "bargained for exchange by subjecting it to the same cost and uncertainty the settlement sought to avoid," Patent Owner's "bargained for exchange" includes settling the Samsung litigation. See Mot. Resp. 2, 8–9. Joinder to the Samsung IPR will not impact the Samsung litigation. And joinder to the Samsung IPR will not preclude terminating Samsung from the Samsung IPR.

Further, both the Federal Circuit and the Supreme Court "have recognized that there is a significant public policy interest in removing invalid patents from the public arena." *SmithKline Beecham Corp. v. Apotex Corp.*, 403 F.3d 1331, 1354 (Fed. Cir. 2005). Under the circumstances here,

that public-policy interest offsets the public-policy interest favoring settlement.

As for Patent Owner's assertion that joinder to the Samsung IPR will prejudice Samsung because Patent Owner "will need to schedule depositions of Samsung's declarants" before filing a response to Samsung's petition, we disagree. *See* Mot. Resp. 9. In the Samsung IPR, Patent Owner and Samsung have stipulated to modifying due date 1 for the response from September 12, 2024, to November 12, 2024. IPR2024-00338, Paper 15 at 1. In the Samsung IPR, Patent Owner has not filed any deposition notices for Samsung's declarants. Significant further effort by Samsung in the Samsung IPR appears unlikely.

Based on the current record and for the reasons discussed above, Petitioner has the better arguments why joinder is appropriate.

3. WHETHER PETITIONER RAISES NEW ISSUES

Petitioner asserts that "the Petition challenges the same claims, asserts the same grounds, and relies on the same evidence for unpatentability presented in the Samsung IPR." Mot. 7, 9; *see id.* at 1, 4. Petitioner also asserts that "the Petition will not add new issues to the Samsung IPR" or introduce "new grounds." *Id.* at 7, 9.

Patent Owner concedes that Petitioner filed "a carbon copy of the Samsung's petition and evidence." Mot. Resp. 1.

Because Petitioner filed "a carbon copy of the Samsung's petition and evidence," the Petition raises no new issues. *Compare* Pet. 16–71, *with* Samsung Pet. 15–68; *see* Mot. Resp. 1.

4. THE IMPACT JOINDER WOULD HAVE
ON THE TRIAL SCHEDULE IN THE SAMSUNG IPR

(a) Petitioner's Position

If joined to the Samsung IPR, Petitioner agrees to take an “understudy” role and “adhere to the same schedule” in the Samsung IPR “unless and until Samsung is no longer a party to the Samsung IPR.”

Mot. 1, 9–10. In its “understudy” role, Petitioner agrees that it will not:

- (1) “delay the schedule” in the Samsung IPR;
- (2) “request any alterations” to the schedule in the Samsung IPR;
- (3) “add any new substantive issues” to the Samsung IPR;
- (4) “make any substantive filing” in the Samsung IPR, unless “the filing concerns termination and settlement or issues solely involving Petitioner”;
- (5) “seek to cross-examine or defend any witness, unless the subject of the testimony concerns issues solely involving Petitioner”;
- (6) “seek discovery from [Patent Owner] on issues that do not solely involve Petitioner”; and
- (7) “present any argument or make any presentation at oral hearing,” unless the issue (i) “solely involves Petitioner,” (ii) “calls for the separate position of each of Petitioner” and Samsung, or (iii) “concerns a motion that does not affect” Samsung.

Id. at 2, 9–11.

Petitioner contends that joinder will not “impact the IPR schedule.” Mot. 9. Petitioner explains, however, that it “would take over the primary role, including the primary role for filings, discovery, and hearings, should Samsung cease to participate in the IPR.” *Id.* at 11. According to Petitioner,

“the current trial schedule can likely be maintained, with at most only slight modifications to” due date 1 for the response, due date 2 for the reply, and due date 3 for the sur-reply. Mot. Reply 4.

(b) Patent Owner’s Position

Patent Owner contends that joinder will “impact the schedule” and will not “simplify briefing” in the Samsung IPR. Mot. Resp. 10–11. Regarding the schedule in the Samsung IPR, Patent Owner asserts that Petitioner “represented to the district court” in the Qualcomm litigation that ““the PTAB will likely adjust the IPR schedule’ resulting in ‘the final written decision [being] pushed back a few months.’” *Id.* at 10 (alteration by Patent Owner) (quoting Ex. 2065, 3 n.4).⁹

Regarding briefing in the Samsung IPR, Patent Owner asserts that briefing “will be eliminated (and therefore simplified) if the Board denies [Petitioner’s] motion and grants the motion to terminate” the Samsung IPR.

(c) Analysis

If Samsung is terminated from the Samsung IPR and the Samsung IPR proceeds because Petitioner is allowed to join, we agree with Petitioner that “the current trial schedule can likely be maintained, with at most only slight modifications to” due date 1 for the response, due date 2 for the reply, and due date 3 for the sur-reply. *See* Mot. Reply 4. As discussed above, Patent Owner and Samsung have already stipulated to modifying due date 1 for the response from September 12, 2024, to November 12, 2024.

IPR2024-00338, Paper 15 at 1; *see supra* § III.D.2(c).

⁹ For Exhibit 2065 (Qualcomm’s Opposed Motion to Stay Pending *Inter Partes* Review), we cite to the page numbers of the motion instead of the header page numbers.

Regarding Petitioner's representation to the district court in the Qualcomm litigation, Petitioner said, "In the event Samsung drops out prior to the PTAB's ruling on [Petitioner's] motion to join, the PTAB will likely adjust the IPR schedule to allow time to decide [Petitioner's] motion, and the final written decision may be pushed back a few months, as permitted by the statute in the event of joinder." Ex. 2065, 3 n.4 (citing 35 U.S.C. § 316(a)(11)). But Samsung has not dropped out prior to a ruling on Petitioner's motion to join. Additionally, the Board expects that the oral argument will occur on the date specified in the Scheduling Order in the Samsung IPR so that issues about extending the final written decision beyond § 316(a)(11)'s one-year period will not arise.

Regarding briefing in the Samsung IPR, allowing Petitioner to join the Samsung IPR and terminating Samsung from the Samsung IPR will not complicate briefing. Because Petitioner filed "a carbon copy of the Samsung's petition and evidence," we see no reason why the briefs filed by Petitioner and Patent Owner would differ significantly from the briefs filed by Samsung and Patent Owner.

Based on the current record and for the reasons discussed above, allowing Petitioner to join the Samsung IPR will not materially affect the trial schedule in the Samsung IPR.

5. CONCLUSION

For the reasons discussed above, we determine that it is appropriate under the circumstances here to join Petitioner as a party to the Samsung IPR. *See* §§ III.D.2–III.D.4. The estoppel provisions of 35 U.S.C. § 315(e) will apply to Petitioner.

IV. CONCLUSION

For the reasons discussed above and in the Samsung IPR Institution Decision, we determine that there is a reasonable likelihood Petitioner would prevail with respect to at least one claim challenged in the Petition. *See* Samsung Inst. Dec. 39–67, 72–86; *supra* §§ III.B.2–III.B.5. We conclude that instituting an *inter partes* review in this proceeding is in the interest of efficient administration of the Office and the integrity of the patent system. *See* 35 U.S.C. § 316(b). Hence, we institute an *inter partes* review of all challenged claims on all challenges included in the Petition. *See SAS Inst. Inc. v. Iancu*, 138 S. Ct. 1348, 1355 (2018) (noting that the language of 35 U.S.C. § 314(b) “indicates a binary choice—either institute review or don’t”); *PGS Geophysical AS v. Iancu*, 891 F.3d 1354, 1360 (Fed. Cir. 2018) (interpreting the statute as requiring “a simple yes-or-no institution choice respecting a petition, embracing all challenges included in the petition”); 37 C.F.R. § 42.108(a). Additionally, we decline to exercise our discretion under § 314(a) to deny institution.

At this preliminary stage, we have not made a final determination about the patentability of any challenged claim, the construction of any claim term, phrase, or limitation, or any other legal or factual issue.

Upon considering the parties’ arguments and the evidence presented, we determine that it is appropriate under the circumstances here to join Petitioner as a party to the Samsung IPR. Joinder to the Samsung IPR will result in the just, speedy, and inexpensive resolution of Petitioner’s challenge. *See* 37 C.F.R. § 42.1(b). Thus, for the reasons discussed above, we grant Petitioner’s Motion for Joinder and join Petitioner as a party to the Samsung IPR.

V. ORDER

Accordingly, it is

ORDERED that, according to 35 U.S.C. § 314(a), an *inter partes* review of claims 2, 6, and 9–16 in the '449 patent is instituted on all challenges included in the Petition;

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

FURTHER ORDERED that Petitioner's Motion for Joinder (Paper 3) is granted, and Petitioner is hereby joined as a petitioner in IPR2024-00338;

FURTHER ORDERED that the instituted grounds for trial in IPR2024-00338 are unchanged, and no other grounds are added in IPR2024-00338;

FURTHER ORDERED that the Scheduling Order entered in IPR2024-00338 (Paper 11), including any schedule changes allowed by the Scheduling Order and agreed by the parties in that proceeding, shall continue to govern the trial schedule in IPR2024-00338;

FURTHER ORDERED that Petitioner's role in IPR2024-00338 shall be limited as stated in Petitioner's Motion for Joinder (Paper 3) unless and until Samsung Electronics Co., Ltd. is terminated from IPR2024-00338;

FURTHER ORDERED that the case caption in IPR2024-00338 shall be changed to reflect joinder of Qualcomm Incorporated as a petitioner according to the attached example;¹⁰

¹⁰ The parties shall modify the caption as appropriate in the event the Board terminates Samsung Electronics Co., Ltd. as a petitioner in IPR2024-00338.

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FURTHER ORDERED that a copy of this Decision be entered into the record of IPR2024-00338; and

FURTHER ORDERED that all further filings shall be made in IPR2024-00338.

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Patent 7,373,449 B2

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[Example Case Caption]

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

SAMSUNG ELECTRONICS CO., LTD.
and QUALCOMM INCORPORATED,
Petitioner,*

v.

NETWORK SYSTEM TECHNOLOGIES, LLC,
Patent Owner.

IPR2024-00338
Patent 7,373,449 B2

* Qualcomm Incorporated filed a petition and a motion for joinder in IPR2024-01081 and has been joined as a petitioner in this proceeding.