Paper 15 Entered: March 7, 2025

UNITED STATES PATENT AND TRADEMARK OFFICE BEFORE THE PATENT TRIAL AND APPEAL BOARD OUT ALL COMMUNICORPOR A TED

QUALCOMM INCORPORATED, Petitioner,

v.

COBBLESTONE WIRELESS, LLC, Patent Owner.

IPR2024-01336 Patent 7,924,802 B2

Before KARL D. EASTHOM, NORMAN H. BEAMER, and RUSSELL E. CASS, *Administrative Patent Judges*.

CASS, Administrative Patent Judge.

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

I. INTRODUCTION

A. Background

Qualcomm Incorporated ("Petitioner") filed a Petition requesting an *inter partes* review of claims 1–4, 6–10, 13, 14, 17, and 21–25 (the "challenged claims") of U.S. Patent No. 7,924,802 B2 (Ex. 1001, "the '802 patent"). Paper 4 ("Pet."). Petitioner also filed a Motion for Joinder to IPR2024-00606 (Paper 3) and a Reasons for Parallel Petitions and Petition Ranking (Paper 2). Cobblestone Wireless, LLC ("Patent Owner") filed a Preliminary Response. Paper 11 ("Prelim. Resp."). With our permission, Petitioner filed a Preliminary Reply (Paper 12, "Prelim. Reply"), and Patent Owner filed a Preliminary Sur-reply (Paper 13, "Prelim. Sur-reply").

We have authority to determine whether to institute an *inter partes* review under 35 U.S.C. § 314 and 37 C.F.R. § 42.4. An *inter partes* review may not be instituted unless it is determined that "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 (2018); *see also* 37 C.F.R § 42.4(a) (2020) ("The Board institutes the trial on behalf of the Director."). 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).

For the reasons provided below and based on the record before us, we determine that Petitioner has demonstrated a reasonable likelihood that it would prevail in showing the unpatentability of at least one of the

challenged claims. Accordingly, we institute an *inter partes* review on all grounds set forth in the Petition.

B. Real Parties in Interest

Petitioner identifies Qualcomm Incorporated and Qualcomm Technologies, Inc. as the real parties in interest. Pet. 105. Petitioner states that it is filing this Petition because "Cobblestone has sued at least one of Qualcomm's customers for infringing the '802 Patent" and states that, "[f]or completeness" it "also identifies its customer Cisco Systems, Inc., which has been named as a defendant in a pending litigation involving the '802 Patent, as an additional real party in interest." *Id.* Patent Owner identifies Cobblestone Wireless, LLC, as the real party in interest. Paper 6, 1.

C. Related Proceedings

The parties identify the following proceedings involving the '802 patent: Cobblestone Wireless, LLC v. Samsung Electronics Co., Ltd., No. 2:23-cv-00285 (E.D. Tex.); Cobblestone Wireless, LLC v. T-Mobile USA, Inc., No. 2:23-cv-00381 (E.D. Tex.); Cobblestone Wireless, LLC v. Cellco Partnership d/b/a Verizon Wireless, Case No. 2:23-cv-00382 (E.D. Tex.); Cobblestone Wireless, LLC v. AT&T Services Inc. No. 2:23-cv-00380 (E.D. Tex.); Cobblestone Wireless, LLC v. Hewlett Packard Enterprise Company, et al., Case No. 2:23-cv-00457 (E.D. Tex.); Cobblestone Wireless, LLC v. CommScope Holding Company, Inc., No. 2:23-cv-00455 (E.D. Tex.); Cobblestone Wireless, LLC v. Cisco Systems, Inc., No. 2:23-cv-00454 (E.D. Tex.); Hewlett Packard Enterprise Company and Cisco Systems, Inc. v. Cobblestone Wireless, LLC, IPR2024-00707; Wireless Communication Systems and Methods, Re-Examination Appl. No. 90/019,458; Samsung Elecs. Am., Inc. v. Cobblestone Wireless, LLC, IPR2024-00606 (PTAB,

filed Feb. 26, 2024); Hewlett Packard Enterprise Co. v. Cobblestone Wireless, LLC, IPR2024-00707 (PTAB, filed Mar. 19, 2024); Cellco Partnership d/b/a Verizon Wireless v. Cobblestone Wireless LLC, IPR2024-00946 (PTAB, filed Jun. 28, 2024). Pet. 105–106; Paper 6, 1–2.

D. The '802 Patent (Ex. 1001)

The '802 patent is directed to a wireless communication system and method that transmits signals simultaneously over a communication channel at different RF center frequencies. Ex. 1001, code (54), code (57). The Background of the '802 patent explains that "[c]ommunication systems generally contain one or more transmission channels to transmit data from the transmitter to the receiver." *Id.* at 1:12–14. The Background describes a transmitter in such a system that "is limited to up-converting a signal to one center frequency (or modulation frequency), which is the LO [(local oscillator)] frequency." Id. at 1:29–32. "Typically," the Background explains, "the amount of information transmitted around the center frequency is limited by the bandwidth of the transmitter around the center frequency," which "limits the amount of data that can be transmitted." Id. at 1:32–35. Thus, "[t]ypical prior art approaches to improving the information capacity in a wireless communication system involve maximizing the bandwidth around the center frequency to increase the amount of information that may be modulated onto the carrier frequency." *Id.* at 1:35–40.

To overcome this issue, the '802 patent proposes "a method of transmitting information in a wireless communication channel" that includes "transmitting first information across a first frequency range having a first center frequency, a first highest frequency, and a first lowest frequency, and

range using the same wireless transmitter," where the second frequency range has "a second center frequency greater than the first center frequency, a second highest frequency, and a second lowest frequency." Ex. 1001, 1:60–2:5.

Figure 2 of the '802 patent, reproduced below, "illustrates a wireless communication system according to one embodiment of the present invention." Ex. 1001, 5:53–54.

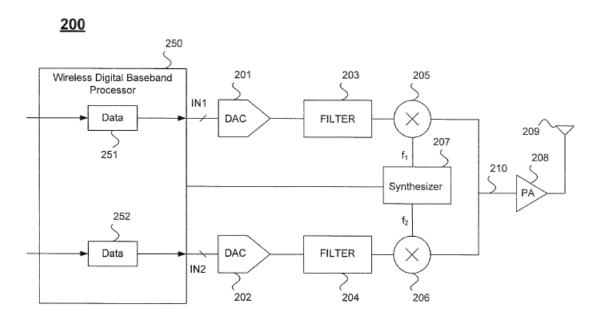


Fig. 2

Figure 2 of the '802 patent illustrates a wireless communication system according to an embodiment of the invention. Ex. 1001, 5:53–54, Fig. 2.

As shown in Figure 2, baseband digital system 250 provides a first digital signal comprising first digital data 251 which is provided as IN1 and a second digital signal comprising second digital data 252 provided as IN2.

Id. at 5:62–66. The first digital data 251 and second digital data 252 may be

unrelated data streams or data from the same data stream. *Id.* at 6:7–9. Each of the first and second digital signals is transmitted to a digital to analog converter (DAC 201 and 202), a filter (203 and 204), and an up-converter (205 and 206). *Id.* at 6:10–26. The up-converters 205 and 206 each receive a first modulation signal having an RF center frequency (f_1 and f_2 , respectively) from synthesizer 207 and generate first and second up-converted signals that are combined at the input to amplifier 208. *Id.* at 6:22–44, 6:57–60, 7:4–7. Amplifier 208 outputs an amplified up-converted signal comprising the first and second up-converted analog signals, and transmits this signal over antenna 209. *Id.* at 7:7–11.

Figure 3 of the '802 patent, reproduced below, illustrates an example of the frequency content of the signal transmitted from the system disclosed in Figure 2.

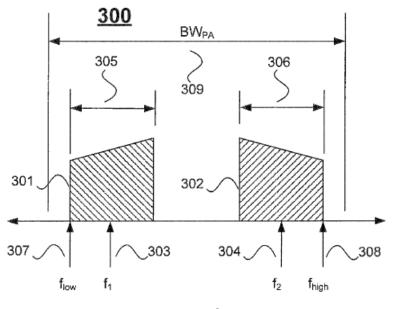


Fig. 3

Figure 3 of the '802 patent illustrates an example of the frequency content of the signal transmitted by the stem of Figure 2. Ex. 1001, 5:58–60, Fig. 3. Figure 3 shows first up-converted analog signal 301 generated by up-converter 205, which has center frequency f₁ and frequency range 305, and

second up-converted analog signal 302 generated by up-converter 206, which has center frequency f_2 and frequency range 306. *Id.* at 6:26–44. The frequency difference between f_1 and f_2 is greater than the sum of one-half of the first frequency range and one-half of the second frequency range, so that the up-converted signals do not overlap and cause distortion. *Id.* at 6:48–53. The first and second up-converted analog signals 301 and 302 may be transmitted by the antenna over bandwidth BW_{PA} 309. *Id.* at 7:9–14.

E. Illustrative Claims

Of the challenged claims, claims 1, 10, 17, and 24 are independent. Claim 1 is illustrative and is reproduced below.

- 1. [pre] A method of transmitting information in a wireless communication channel comprising:
 - [1a] transmitting first information across a first frequency range using a wireless transmitter, the first frequency range having a first center frequency, a first highest frequency, and a first lowest frequency; and
 - [1b] simultaneously transmitting second information across a second frequency range using the same wireless transmitter, the second frequency range having a second center frequency, a second highest frequency, and a second lowest frequency.

Ex. 1001, 13:59–14:3 (bracketed paragraph identifiers added).

F. Applied References

Petitioner relies upon the following references:

Rick et al., U.S. Patent No. 8,693,525 B2, issued Apr. 8, 2014 (Ex. 1021, "Rick");

Suzuki et al., US 2006/0276146 A1, published Dec. 7, 2006 (Ex. 1004, "Suzuki");

Fernandez, US 2009/0052556 A1, published Feb. 26, 2009 (Ex. 1005, "Fernandez");

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Montojo et al., US 2005/0135312 A1, published June 23, 2005 (Ex. 1006, "Montojo");

Jalali et al., U.S. Patent No. 6,952,454, published Oct. 4, 2005 (Ex. 1008, "Jalai");

Chen et al., U.S. Patent No. 6,359,868, issued Mar. 19, 2002 (Ex. 1009, "Chen");

Etemad, U.S. Patent No. 8,036,702 B2, issued Oct. 11, 2011 (Ex. 1014, "Etemad").

Pet. 4.

Petitioner submits the Declaration of Dr. Kevin C. Almeroth (Ex. 1003).

G. Asserted Grounds of Unpatentability Petitioner challenges the patentability of claims 11–17 of the '028 patent based on the following grounds:

Claims Challenged	35 U.S.C. §	Reference(s)/Basis
1	$103(a)^1$	Rick
1–4, 6–8, 10, 13, 17, 21–22	103(a)	Suzuki
7–9, 22, 23	103(a)	Suzuki, Jalai
14, 24, 25	103(a)	Suzuki, Chen
6, 13, 21	103(a)	Suzuki, Etemad
1–4, 6–8, 10, 13, 17, 21, 22	103(a)	Fernandez, Montojo
7–9, 22, 23	103(a)	Fernandez, Montojo, Jalai
14, 24, 25	103(a)	Fernandez, Montojo, Chen
6, 13, 21	103(a)	Fernandez, Montojo, Etemad

Pet. 4.

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¹ The Leahy-Smith America Invents Act, Pub. L. No. 112-29, 125 Stat. 284 (2011) ("AIA"), included revisions to 35 U.S.C. § 103 that became effective after the filing of the application that led to the '802 patent. Therefore, we apply the pre-AIA version of 35 U.S.C. § 103.

II. DISCUSSION

A. Discretionary Denial Under General Plastic

The Petition in this proceeding is a "me-too" petition asserting the same grounds of unpatentability as those upon which we instituted trial in IPR2024-00606. *Compare* Pet. 4 *with* IPR2024-00606, Paper 3 at 2–3. At this stage of the proceeding, the only dispute between the parties is whether we should exercise our discretion to deny institution of the Petition under *General Plastic Indus. Co. v. Canon Kabushiki Kaisha*, IPR2016–01357. *See* Prelim. Resp. Below, we provide a brief background of the procedural history of this proceeding and other relevant *inter partes* review proceedings involving the '802 patent, followed by an analysis of the facts of the present case under *General Plastic* and its progeny.

1. Procedural Background

On February 26, 2024, Samsung Electronics America, Inc. and Samsung Electronics Co., Ltd. filed IPR2024-00606 challenging claims 1–4, 6–10, 13, 14, 17, and 21–25 of the '802 patent. IPR2024-00606 (the "Samsung IPR"). On June 14, 2024, Patent Owner responded by filing a Preliminary Response raising a number of substantive arguments challenging Samsung's prior art grounds and arguing that the Petition failed to show a reasonable likelihood of prevailing. IPR2024-00606, Paper 8. On September 13, 2024, we granted institution in the Samsung IPR, finding that Samsung had demonstrated a reasonable likelihood that at least one claim of the '802 patent is unpatentable. IPR2024-00606, Paper 13. On November 1, 2024, the parties in the Samsung IPR filed a joint motion to terminate the proceeding due to settlement, which we granted on January 2, 2025. IPR2024-00606, Papers 19, 20.

On March 19, 2024, Hewlett Packard Enterprise Company and Cisco Systems, Inc. filed IPR2024-00707 challenging claims 1–9 of the '802 patent (the "Cisco IPR") based on different prior art and unpatentability arguments than those raised in the Samsung IPR. IPR2024-00707, Paper 3. Patent Owner filed a Preliminary Response in the Cisco IPR on June 27, 2024. IPR2024-00707, Paper 7. On September 24, 2024 we granted institution, finding that Hewlett-Packard and Cisco had demonstrated a reasonable likelihood that at least one claim of the '802 patent is unpatentable. *Id.*, Paper 17. The Cisco IPR remains pending, and an oral hearing is set for July 2, 2025.

On August 28, 2024, Petitioner filed the instant proceeding, which challenged the same claims of the '802 patent as the Samsung IPR, and raised the identical prior art, arguments, and evidence as the Samsung IPR. Paper 4 ("Pet."). Petitioner also filed a motion to join the Samsung IPR. Paper 3. Petitioner represented that it expeditiously filed the Petition in this case as a "copycat" of the petition in the Samsung IPR after learning from a filing in the district court that Samsung and Patent Owner had reached an agreement in principle to settle the parties' dispute. Pet. 104; Ex. 1028.

2. The General Plastic Decision

Under *General Plastic*, the Board may deny a petition based on the discretionary authority of § 314(a). *General Plastic*, Paper 19 at 15. In *General Plastic*, the Board articulated a list of non-exclusive factors to be considered in determining whether to exercise discretion under § 314(a) to deny a petition:

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.

General Plastic, Paper 19 at 16 (citing NVIDIA Corp. v. Samsung Elec. Co., IPR2016-00134, Paper 9 at 6–7 (PTAB May 4, 2016)).

3. The Parties' Arguments

Patent Owner argues that the *General Plastic* factors weigh in favor of denying institution. Prelim. Resp. 7. For factor 1, Patent Owner argues that Cisco is a customer of Petitioner and a real party in interest in this proceeding, and that the Petition challenges all of the same claims of the '802 patent as the Cisco IPR except for claim 5. *Id.* at 7–9. Patent Owner also asserts that denial is appropriate even though the instant Petition is a "copy-cat" of the one in the Samsung IPR because "the *General Plastic* factors are relevant... even when the petition is a follow-on petition." *Id.* at 9 (quoting *Apple, Inc. v. Uniloc 2017 LLC*, IPR2020-00854, Paper 9 at 8 (PTAB Oct. 28, 2020) (precedential)). "This is because," Patent Owner

contends, "due to the intimate relationship between Cisco and Qualcomm, it would be as if [Qualcomm] had brought the second challenge to the patent in the first instance," which "is the kind of serial attack *General Plastic* was intended to address." *Id.* (quoting *Uniloc* at 4).

For factor 2, Patent Owner argues that Petitioner should have known of the art relied on in the Petition at the time the Cisco IPR was filed because the Petition is a "copy-cat" of the petition in the earlier-filed Samsung IPR. *Id.* at 9–10. For factor 3, Patent Owner argues that Petitioner benefited from the preliminary responses in the Samsung and Cisco IPRs because Petitioner "could have reviewed the petitions and preliminary responses" in those cases, "evaluated the merits of them, and decided which IPR it preferred to join. *Id.* at 11. For factors 4 and 5, Patent Owner asserts that Petitioner waited over five months after the filing of the Samsung IPR to bring this proceeding, and has not provided an adequate explanation for the delay. *Id.* at 11–12. For factors 6 and 7, Patent Owner contends that this proceeding "implicate[s] the efficiency concerns underpinning *General Plastic*." *Id.* at 13.

Petitioner argues that it is not "one and the same" with Cisco, that "Cisco is just one of Petitioner's many customers," and that Petitioner had no involvement in the petition in the Cisco IPR. Prelim. Reply 1. Petitioner distinguishes the instant case from *Uniloc*, asserting that *Uniloc* "presented the very different situation in which the same Petitioner filed a second petition after the Board *denied* institution of an earlier petition." *Id.* at 1–2 (citing *Uniloc* at 4). On the other hand, Petitioner contends, here "the Board *granted* institution of the earlier relevant petitions *after* Qualcomm filed its petition in the present case. *Id.* at 2. "Thus," according to Petitioner, "there

is no concern here that Qualcomm seeks an unfair second bite at the apple." *Id.*

Petitioner also argues that the present case is similar to *Qualcomm Inc. v. Network System Technologies*, IPR2024-01081, Paper 14 at 31–33 (PTAB, Oct. 1, 2024). Prelim. Reply 2–3. Petitioner asserts that in *Network System*, the Board instituted a petition where there was an earlier IPR raising the same challenges and unpatentability theories that had settled. *Id.* In particular, according to Petitioner, the Board explained that, under factor 3, "the 'potential for abuse' from roadmapping is minimized for a copycat petition that is 'based on the same prior art and the same unpatentability theories' as in the earlier petition." *Id.* at 3 (citing *Network System* at 34–45). "Likewise here," Petitioner contends, "Patent Owner faces minimal prejudice in responding to patentability arguments to which it had already responded in the Samsung IPR and which the Board has already instituted." *Id.*

Patent Owner responds that *Network Systems* is "readily distinguishable" from the present case because in *Network Systems* "[t]he Board found that there was not a 'significant relationship' between Qualcomm and the prior petitioner in that proceeding (Samsung) because the only connection between Qualcomm and Samsung was that they had both been sued for infringing the same patent by the same plaintiff." Prelim. Surreply 3 (citing *Network System* at 32). Here, by contrast, Patent Owner contends, there is a "significant relationship" between Petitioner and Cisco because Cisco is a customer of Petitioner and Petitioner identified Cisco as a real party in interest in the Petition. *Id.* at 2.

4. Analysis

In evaluating the present case, we find that two Board decisions, one a Director Review decision, and the other a precedential Board decision, are particularly pertinent.

In *Code200 v. Bright Data Ltd.*, IPR2022-00861, Paper 18 (PTAB Aug. 23, 2022) (Director Review Decision), petitioner Code200 filed a first petition that the Board discretionarily denied under *Apple Inc. v. Fintiv, Inc.*, IPR2020-00019, Paper 11 (PTAB Mar. 20, 2020) (precedential), and then subsequently sought to join a later petition filed by another party by filing a "copycat" of the petition filed by that party. *Code200* at 2–3 & n.3. The Director held that

"allowing [a petitioner] the opportunity to pursue a decision on the merits" in a second-filed petition, when the first-filed petition was not evaluated on the merits, "best balances the desires to improve patent quality and patent-system efficiency against the potential for abuse of the review process by repeated attacks on patents." *Intel Corp. v. VLSI Tech. LLC*, IPR2022-00366, Paper 14 (Jun. 8, 2022), 9–10. Holding otherwise would undercut the congressional grant to the United States Patent and Trademark Office of "significant power to revisit and revise earlier patent grants" as a mechanism "to improve patent quality and restore confidence in the presumption of validity that comes with issued patents." *Cuozzo Speed Techs.*, *LLC v. Lee*, 579 U.S. 261, 272 (2016) (quoting H.R. Rep. No. 112-98, pt. 1, at 45, 48).

Code 200 at 4-4.

The Director explained that "General Plastic factor 1 must be read in conjunction with factors 2 and 3," so that when a "first-filed petition under factor 1 was discretionarily denied or otherwise was not evaluated on the merits, factors 1–3 only weigh in favor of discretionary denial when there are 'road-mapping' concerns under factor 3 or other concerns under factor

2." Code200 at 5. The Director found "no evidence of road-mapping," and explained that "road-mapping' concerns are minimized when, as in this case, a petitioner files a later petition that raises unpatentability challenges substantially overlapping with those in the previously-filed petition and the later petition is not refined based on lessons learned from later developments." Id.; see also Network System at 34–35 (citing Code200 for this proposition). Based on the above-noted circumstances in Code200, the Director held that discretionary denial under General Plastic was not warranted. Id. at 5, 7.

In *Uniloc*, the petitioner (Apple) filed a first *inter partes* review petition that was denied on the merits, and then later sought to join another inter partes review proceeding raising different arguments brought by a different petitioner (Microsoft) by filing a second petition substantially identical to the one in the Microsoft IPR. Uniloc at 2-4, 5-7. Apple's second petition was filed more than a year after it was sued in district court on the same patent, and therefore, absent joinder, it would have been barred from filing any further petitions challenging the patent at issue under 35 U.S.C. § 315(b). *Id.* at 6. The Board determined that it was proper to exercise its discretion to deny institution. Id. at 13. In doing so, the Board explained that "[t]he timing of events here shows that Apple indeed had two Board decisions concerning its first petition, the decision denying institution and a decision of the request for rehearing of that decision." Id. at 10. Thus, the Board determined that Apple's argument that its second petition was substantially identical to the petition in the Microsoft IPR and that it only sought to join that IPR as an "understudy" was not persuasive. *Id.*

Considering these cases in the context of the *General Plastic* factors, we determine that discretionary denial is not appropriate in the circumstances of this case. With respect to *General Plastic* factor 1, we agree with Patent Owner that Cisco is a customer of Petitioner and was identified by Petitioner as a real party in interest, and therefore has a "significant relationship" with Petitioner under *Valve Corp. v. Elec.*Scripting Prods., Inc., IPR2019-00062, Paper 11 at 9 (PTAB Apr. 2, 2019) (precedential) ("Valve"). However, we are mindful of the Director's finding in Code200 that "General Plastic factor 1 must be read in conjunction with factors 2 and 3," and that "[w]here the first-filed petition under factor 1 was discretionarily denied or otherwise was not evaluated on the merits, factors 1–3 only weigh in favor of discretionary denial when there are 'road-mapping' concerns under factor 3 or other concerns under factor 2."

Code200 at 5.

Here, although the petitions in the Samsung and Cisco IPRs were not discretionarily denied, institution was granted, indicating that the Board believed that the challenges to the '802 claim had merit. Indeed, the Board determined in its institution decision for the Samsung IPR that Petitioner had "made a strong showing of unpatentability that rises well above the minimum sufficiency to meet the statutory institution threshold." IPR2024-00606, Paper 13 at 42. We also find that there is a lack of "road-mapping" in the present case. The Petition in this case is substantively identical to the petition in the Samsung IPR, and thus could not take into account the points made in the preliminary response or institution decision in that case. Additionally, the petition in the Samsung IPR was filed before the Cisco IPR, and therefore the Petition in this case (which is substantively identical

to that in the Samsung IPR) was not drafted based on learnings from the preliminary response or institution decision in the Cisco IPR. As the Director explained in Code200, "road-mapping' concerns are minimized when . . . a petitioner files a later petition that raises unpatentability challenges substantially overlapping with those in the previously-filed petition and the later petition is not refined based on lessons learned from later developments," which is the case here. See Code200 at 5.

We disagree with Patent Owner's argument that Petitioner engaged in "road-mapping" because it "could have reviewed the petitions and preliminary responses" in the Samsung and Cisco IPRs, "evaluated the merits of them, and decided which IPR it preferred to join." Prelim.

Resp. 11. We find that this is not the kind of "road-mapping" described in General Plastic because the Petition in this case does not respond to arguments set forth in the preliminary responses and institution decisions in the Samsung and Cisco IPRs, and has not been refined or altered based on proceedings in those IPRs. We also find that the present case is distinguishable from Uniloc because, in Uniloc, the petitioner's previous IPR was considered on the merits and institution was denied, while here the Samsung and Cisco IPRs were found to have merit and were instituted.²

Additionally, as in *Code200*, we find that factors 2, 4, and 5 "have limited relevance" due to the lack of "road-mapping." *See Code 200* at 6.

² We also note that, unlike in *Uniloc*, Petitioner is not time-barred from filing this petition based on 35 U.S.C. § 315(b). Petitioner itself was not sued in district court based on the '802 patent, and the Petition in this case was filed on August 28, 2024, which is less than a year after the district court case against Cisco was filed on September 29, 2023. IPR2024-00707, Ex. 2004; IPR2024-00707, Paper 7 at 45.

With respect to factor 6, the Board has already invested significant resources in evaluating and instituting the Samsung IPR, and therefore continuing to evaluate those challenges would be an efficient use of the Board's resources. Here, as in Code200, we find that "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' this petition. *Id.* at 6 (quoting Cuozzo Speed Techs., LLC v. Lee, 579 U.S. 261, 272 (2016). Finally, we do not expect there to be an issue in reaching a final determination within one year after institution of this proceeding, so factor 7 does not weigh in favor of discretionary denial.

Consequently, after weighing the *General Plastic* factors, we find that exercising our discretion to deny institution is not warranted in this case.

B. Principles of Law

A claim is unpatentable under 35 U.S.C. § 103 if "the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains." *KSR Int'l Co. v. Teleflex Inc.*, 550 U.S. 398, 406 (2007). The question of obviousness is resolved on the basis of underlying factual determinations, including (1) the scope and content of the prior art; (2) any differences between the claimed subject matter and the prior art; (3) the level of skill in the art; and (4) where in evidence, objective evidence of non-obviousness. ³ *Graham v. John Deere Co.*, 383 U.S. 1, 17–18 (1966). When evaluating a combination of teachings, we must also "determine"

³ At this stage of the proceeding, Patent Owner has not presented objective evidence of non-obviousness.

whether there was an apparent reason to combine the known elements in the fashion claimed by the patent at issue." *KSR*, 550 U.S. at 418 (citing *In re Kahn*, 441 F.3d 977, 988 (Fed. Cir. 2006)). Whether a combination of prior art elements would have produced a predictable result has weight in the ultimate determination of obviousness. *Id.* at 416–417.

In an *inter partes* review, the petitioner must show with particularity why each challenged claim is unpatentable. *Harmonic Inc. v. Avid Tech., Inc.*, 815 F.3d 1356, 1363 (Fed. Cir. 2016); 37 C.F.R. § 42.104(b) (2020). The burden of persuasion never shifts to Patent Owner. *Dynamic Drinkware, LLC v. Nat'l Graphics, Inc.*, 800 F.3d 1375, 1378 (Fed. Cir. 2015).

We analyze the challenges presented in the Petition in accordance with the above-stated principles.

C. Level of Ordinary Skill in the Art

Petitioner contends that a person of ordinary skill in the art at the time of the alleged invention would have had "at least a bachelor's in EE/CE/CS, physics, or equivalent, and two years of experience with cellular telecommunications, radio-access network architectures, protocols and signal propagation in wireless networks." Pet. 4 (citing Ex. 1003 ¶¶ 50–51). Petitioner further states that "[m]ore education can supplement practical experience and vice versa." *Id.* Patent Owner does not offer a proposed level of ordinary skill at this stage of the proceeding. *See* Prelim. Resp.

At this stage of the proceeding, we adopt Petitioner's assessment of the level of skill in the art, which is consistent with the '802 patent and the asserted prior art of record.

D. Analysis of the Grounds Raised in the Petition

The Petition is substantively identical to the petition in the Samsung IPR. Moreover, Patent Owner did not raise substantive arguments against the grounds set forth in the Petition, but instead relied only on arguments for discretionary denial. *See* Prelim. Resp. We adopt the analysis set forth in our institution decision in the Samsung IPR and, based on that analysis, determine that Petitioner has established a reasonable likelihood of unpatentability of at least one of the challenged claims of the '802 patent. *See* IPR2024-00606, Paper 13 at 8–37.

III. MOTION FOR JOINDER

As noted above, Petitioner also filed a Motion for Joinder to the Samsung IPR. Paper 3. Because the Samsung IPR has been terminated, we find that the Motion for Joinder is moot, and dismiss it accordingly.

IV. CONCLUSION

Based on the analysis above, we determine that it is not appropriate to exercise our discretion to deny institution of the Petition, and that Petitioner has demonstrated a reasonable likelihood of success in proving that at least one of the challenged claims of the '802 patent is unpatentable. We therefore institute trial on all challenged claims and grounds raised in the Petition. See PGS Geophysical AS v. Iancu, 891 F.3d 1354, 1360 (Fed. Cir. 2018) (a decision whether to institute an inter partes review "require[s] a simple yes-or-no institution choice respecting a petition, embracing all challenges included in the petition").

At this stage of the proceeding, we have not made a final determination as to the patentability of any challenged claim or as to the construction of any claim term.

V. ORDER

In consideration of the foregoing, it is hereby

ORDERED that, pursuant to 35 U.S.C. § 314(a), an *inter partes* review of claims 1–4, 6–10, 13–14, 17, and 21–25 of the '802 patent is instituted with respect to all grounds set forth in the Petition;

FURTHER ORDERED that the Motion for Joinder is *dismissed*; and FURTHER ORDERED that, pursuant to 35 U.S.C. § 314(c) and 37 C.F.R. § 42.4(b), *inter partes* review of the '802 patent shall commence on the entry date of this Order, and notice is hereby given of the institution of a trial.

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