

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

QUALCOMM INCORPORATED,
Petitioner,

v.

COBBLESTONE WIRELESS, LLC,
Patent Owner.

IPR2024-01336
Patent 7,924,802 B2

PATENT OWNER'S PRELIMINARY RESPONSE

TABLE OF CONTENTS

I.	Introduction.....	1
II.	Factual Background	2
III.	Petitioner’s motion for joinder should be denied as moot.	3
IV.	The Board should exercise its discretion and deny institution of the Instant Petition under <i>General Plastic</i> and its progeny in view of the Cisco IPR.....	4
	A. <i>General Plastic</i> Factor 1: Petitioner Qualcomm’s co-RPI previously filed a petition directed to overlapping claims of the same patent.	7
	B. <i>General Plastic</i> Factor 2: Petitioner knew or should have known of the prior art asserted in the Instant Petition at the time the Cisco IPR was filed.....	9
	C. <i>General Plastic</i> Factor 3: At the time the Instant Petition was filed, the preliminary responses in both the Cisco and Samsung IPRs had been filed.	10
	D. <i>General Plastic</i> Factor 4: Over five months elapsed between when Petitioner knew or should have known of the prior art asserted in the Instant Petition, and the filing of the Instant Petition.	11
	E. <i>General Plastic</i> Factor 5: Petitioner does not provide an adequate explanation for the time elapsed between the filing of the Cisco IPR and the Instant Petition.	12
	F. <i>General Plastic</i> Factors 6 and 7: The finite resources of the Board, and the requirement of the Board to issue a final written decision not later than one year after institution, counsel against institution. ..	12
V.	Conclusion	13

TABLE OF AUTHORITIES

Cases

<i>Apple, Inc. v. Uniloc 2017 LLC</i> , IPR2020-00854, Paper 9 (PTAB Oct. 28, 2020)	9, 11, 12, 13
<i>General Plastic Indus. Co. v. Canon Kabushiki Kaisha</i> , IPR2016-01357, Paper 19 (PTAB Sept. 6, 2017)	passim
<i>Guangdong Boltpower Energy Co. v. Noco Co.</i> , IPR2021-00309, Paper 11 (PTAB May 10, 2021)	9, 13
<i>Kyocera Corp. v. Softview LLC</i> , IPR2013-00004, Paper 15 (PTAB Apr. 24, 2013)	4
<i>T-Mobile USA, Inc. v. VoIP-Pal.com, Inc.</i> , IPR2023-00638, Paper 11 (PTAB July 28, 2023)	8, 13
<i>T-Mobile USA, Inc. v. VoIP-Pal.com, Inc.</i> , IPR2023-00638, Paper 14 (PTAB Oct. 3, 2023)	8
<i>Valve Corp. v. Elec. Scripting Prods., Inc.</i> , IPR2019-00062, Paper 11 (PTAB Apr. 2, 2019)	8, 11, 12, 13

Statutes

35 U.S.C. § 314(a)	4
35 U.S.C. § 316(a)	6

PATENT OWNER'S EXHIBIT LIST

No.	Description
Ex. 2001	<i>Samsung Elecs. Am, Inc. et al. v. Cobblestone Wireless, LLC</i> , IPR2024-00606, Institution Decision, Paper 13 (PTAB Sept. 10, 2024)
Ex. 2002	<i>Cellco P'ship d/b/a Verizon Wireless et al. v. Cobblestone Wireless, LLC</i> , IPR2024-00946, Petition, Paper 1 (PTAB June 28, 2024)
Ex. 2003	<i>Hewlett Packard Enter. Co. et al. v. Cobblestone Wireless, LLC</i> , IPR2024-00707, Institution Decision, Paper 17 (PTAB Sept. 24, 2024)
Ex. 2004	<i>Cellco P'ship d/b/a Verizon Wireless et al. v. Cobblestone Wireless, LLC</i> , IPR2024-00946, Termination Decision, Paper 12 (PTAB Nov. 15, 2024)
Ex. 2005	<i>Samsung Elecs. Am, Inc. et al. v. Cobblestone Wireless, LLC</i> , IPR2024-00606, Motion to Terminate, Paper 19 (PTAB Nov. 1, 2024)
Ex. 2006	Email correspondence between PTAB and counsel regarding conference call addressing Petitioner's motion for joinder in this IPR, dated November 13-18, 2024
Ex. 2007	<i>Samsung Elecs. Am, Inc. et al. v. Cobblestone Wireless, LLC</i> , IPR2024-00606, Scheduling Order, Paper 14 (PTAB Sept. 12, 2024)
Ex. 2008	<i>Hewlett Packard Enter. Co. et al. v. Cobblestone Wireless, LLC</i> , IPR2024-00707, Patent Owner Preliminary Response, Paper 7 (PTAB June 27, 2024)
Ex. 2009	<i>Samsung Elecs. Am, Inc. et al. v. Cobblestone Wireless, LLC</i> , IPR2024-00606, Petition, Paper 3 (PTAB Feb. 26, 2024)
Ex. 2010	<i>Hewlett Packard Enter. Co. et al. v. Cobblestone Wireless, LLC</i> , IPR2024-00707, Petition, Paper 3 (PTAB Mar. 19, 2024)
Ex. 2011	<i>Samsung Elecs. Am, Inc. et al. v. Cobblestone Wireless, LLC</i> , IPR2024-00606, Patent Owner Preliminary Response, Paper 8 (PTAB June 14, 2024)

I. Introduction

The Board should deny Petitioner's motion for joinder as moot, and deny institution of this Petition for *inter partes* review ("IPR") of U.S. Patent No. 7,924,802 ("the '802 patent") as an unjustified follow-on petition.

As an initial matter, the Board should deny Petitioner's motion to join a previously-instituted IPR on the '802 patent filed by Samsung for two reasons: (1) because that proceeding is soon to be terminated due to settlement, and (2) because Petitioner has offered no explanation for how it could, as it claims, adhere to the relatively advanced schedule of the Samsung IPR in this proceeding.

In addition, this Petition is also an unjustified follow-on petition, and institution should be denied under *General Plastic* and its progeny. Petitioner Qualcomm seeks to join the soon-to-be-terminated Samsung IPR, but its co-RPI Cisco is already a party to a *different* instituted IPR challenging substantially overlapping patent claims. Qualcomm also knew or should have known of the prior art it asserts in this Petition for many months before it filed it, given that the art was identified in the Samsung IPR. Petitioner Qualcomm also offers no explanation for its delay in filing this Petition five months after the Cisco IPR, and nearly six months after the Samsung IPR. The Board should exercise its discretion and deny institution of the Petition as a serial and repetitive attack that does nothing but bring inequity and prejudice to Patent Owner and unnecessarily consume limited Board resources.

II. Factual Background

On August 28, 2024, Petitioner Qualcomm Inc. filed the Instant Petition. Prior to that petition being filed, other parties filed IPR petitions on the same patent. The below chart summarizes the IPR petitions filed on the '802 patent:

IPR Number	Date Filed	Petitioner(s)
IPR2024-00606 ("Samsung IPR")	Feb. 26, 2024	Samsung Electronics America, Inc.; Samsung Electronics Co., Ltd.
IPR2024-00707 ("Cisco IPR")	Mar. 19, 2024	Cisco Systems, Inc.; Hewlett Packard Enterprise Co.
IPR2024-00946 ("Carrier IPR")	June 28, 2024	Cellco Partnership d/b/a Verizon Wireless; T-Mobile USA, Inc.; AT&T Services Inc.; AT&T Mobility LLC
IPR2024-01336 ("Instant Petition")	Aug. 28, 2024	Qualcomm Inc.

Both the petition in the Carrier IPR and the Instant Petition are “copy-cat” petitions of that filed in the Samsung IPR, which was instituted on September 12, 2024. *See* Ex. 2001; *see also* Paper 4 (“Pet.”) at 104; Paper 3 (“Joinder Motion”); Ex. 2002 at 102-103. Of the above-listed petitions, only that from the Cisco IPR is unique; the Cisco IPR was instituted on September 24, 2024. Ex. 2003.

The Carrier Petition was never instituted, and has been terminated due to settlement. Ex. 2004. There is also a pending motion to terminate the Samsung IPR for the same reasons, the proceeding that Petitioner Qualcomm seeks to join. *See* Ex.

2005. That motion is still pending. However, at Petitioner’s request, on November 25, 2024, the Board held a conference call to discuss Petitioner Qualcomm’s request to join the Samsung proceeding, in light of Samsung’s settlement with Patent Owner. *See Ex. 2006*. During that call, Petitioner’s counsel urged the Board to place the Instant Petition on the same or a similar schedule as the soon-to-be-terminated Samsung IPR. In response, Patent Owner’s counsel explained that this is not feasible because of impending deadlines—Patent Owner’s Response in the Samsung proceeding would have been due on December 3, 2024 (*Ex. 2007* at 11), while the Board’s deadline for the institution decision in this proceeding is not until mid-March 2025. The Board declined Petitioner’s request to put this proceeding on an accelerated schedule, indicated that a decision on termination of the Samsung IPR will be forthcoming, and informed the parties that institution of the Instant Petition will be decided in the ordinary timeframe.

III. Petitioner’s motion for joinder should be denied as moot.

The IPR that Petition seeks to join, the Samsung IPR, will likely soon be terminated as a result of settlement. There will therefore be nothing remaining for Petitioner Qualcomm to “join.” Moreover, the Board has already effectively denied Petitioner’s motion for joinder by declining Petitioner’s invitation to place this proceeding on an accelerated schedule in view of the Samsung IPR. *See supra* § II.

Indeed, this is the correct course of action in view of the factors set forth in

Kyocera Corp. v. Softview LLC, IPR2013-00004, Paper 15 at 4 (PTAB Apr. 24, 2013). Even though the Instant Petition does not raise new issues as compared with the Samsung IPR, Petitioner is simply incorrect that “[j]oinder would, therefore, have little, if any, impact on the Samsung IPR” such that “the schedule would not be affected.” Joinder Motion at 4. As noted above, the institution decision in this proceeding is not due until mid-March 2025. By that time, numerous major deadlines would already have passed in the Samsung IPR, including Patent Owner’s Response and Petitioner’s Reply. Petitioner Qualcomm offers no explanation for how it could possibly “adhere to the Scheduling Order for the Samsung IPR” as it claims it would do if joinder were granted. *Id.* at 5. But perhaps even more critically, as a matter of logic, it is hard to conceive how this motion for joinder could be granted when the proceeding that Petitioner seeks to join will likely be terminated due to settlement. Qualcomm’s motion for joinder should be denied as moot.

IV. The Board should exercise its discretion and deny institution of the Instant Petition under *General Plastic* and its progeny in view of the Cisco IPR.

35 U.S.C. § 314(a) gives the Board discretion to deny institution of IPR of unjustified follow-on petitions.¹ See *General Plastic Indus. Co. v. Canon Kabushiki*

¹ Petitioner filed a separate paper providing purported reasons for both Petitioner and its co-RPI Cisco Systems, Inc. filing “parallel petitions” with different grounds.

Kaisha, IPR2016-01357, Paper 19 at 8, 18-19 (PTAB Sept. 6, 2017) (precedential) (“*General Plastic*”). The Board has set forth seven factors for determining whether discretionary denial of a follow-on petition is appropriate:

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;

Paper 2 (“Ranking Paper”); *see also* Pet. at 105 (identifying Cisco as an RPI). However, the Cisco IPR and the Instant Petition are not parallel petitions because the Instant Petition was not “filed against the same patent ***at or about the same time (e.g., before the first preliminary response by patent owner)***.” Consolidated Trial Practice Guide at 59 (emphasis added). Here, Patent Owner filed its preliminary response in the Cisco IPR over two months before the Instant Petition was filed. *Compare* Pet. at 107 (dated August 28, 2024) *with* Ex. 2008 at 53 (Cisco POPR dated June 27, 2024). Because the proper analysis here is under the *General Plastic* rubric, that is what Patent Owner focuses on in this preliminary response. However, the same principles would apply and would counsel in favor of the Board exercising its discretion to deny institution even if the Board were to consider the Cisco and Qualcomm proceedings “parallel.”

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.

Id. at 16. “Although [the Board] recognize[s] that an objective of the AIA is to provide an effective and efficient alternative to district court litigation, [it] also recognize[s] the potential for abuse of the review process by repeated attacks on patents.” *Id.* at 16-17. Thus, the Board’s “intent in formulating the[se] factors was to take undue inequities and prejudices to Patent Owner into account.” *Id.* at 17. “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 [Board] decisions as a roadmap, until a ground is found that results in the grant of review,” which “is unfair to patent owners and is an inefficient use of the *inter*

partes review process.” *Id.*

Each of these seven *General Plastic* factors weigh in favor of the Board exercising its discretion to deny institution here. For Factor 1, Petitioner Qualcomm challenges all of the same patent claims are challenged in its co-RPI and customer Cisco’s IPR, except claim 5. For Factors 2, 4, and 5, Petitioner Qualcomm either knew or should have known of the art asserted in the Instant Petition at the time the Cisco IPR was filed because the Samsung IPR was filed over three weeks before the Cisco IPR, and Qualcomm offers no explanation for filing the Instant Petition five months after the Cisco IPR. For Factor 3, Qualcomm had the preliminary responses in both the Samsung and Cisco IPRs prior to filing the Instant Petition, giving it the opportunity to evaluate the strength of the grounds in both proceedings and decide which it preferred to join. And for Factors 6 and 7, that Petitioner Qualcomm has agreed to take an understudy role does not help conserve finite Board resources where the proceeding it seeks to join is soon to be terminated due to Samsung’s settlement with Patent Owner, and Qualcomm intends to step out of that understudy role due to that settlement. Each of these factors is addressed in more detail below.

A. *General Plastic* Factor 1: Petitioner Qualcomm’s co-RPI previously filed a petition directed to overlapping claims of the same patent.

The petitioners in the Cisco IPR and the Instant Petition are not identical, but “application of the *General Plastic* factors is not limited solely to instances when

multiple petitions are filed by the same petitioner. Rather, when different petitioners challenge the same patent, [the Board] consider[s] 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*”). Here, Qualcomm and Cisco are intimately related. Indeed, Petitioner Qualcomm named Cisco as a co-RPI in the Instant Petition. Pet. at 105; *see also id.* at 104. And Qualcomm represents that it “file[d] this Petition because [Patent Owner] Cobblestone has sued at least one of Qualcomm’s customers for infringing the ’802 Patent”—that customer is Cisco. *Id.* at 105.

There is also substantial overlap in the patent claims challenged in the Cisco IPR and the Instant Petition. The Cisco IPR challenges claims 1-9 (Ex. 2010 at 1), and the Instant Petition challenges all of those claims except claim 5 and also challenges some additional claims (Pet. at 1). This overlap in challenged claims weighs in favor of denial of institution. *See, e.g., T-Mobile USA, Inc. v. VoIP-Pal.com, Inc.*, IPR2023-00638, Paper 11 at 7 & n.5 (PTAB July 28, 2023) (“*T-Mobile*”), *Director review denied*, Paper 14 (PTAB Oct. 3, 2023) (denying institution where all claims challenged in the first petition were challenged in the second petition, even though the second petition challenged additional claims).

Petitioner Qualcomm argues that *General Plastic* does not apply here because the Instant Petition is not a “follow-on” petition, but is rather a “copycat” petition.

Pet. at 104. But this argument has been rejected by the Board repeatedly, including in the precedential *Apple, Inc. v. Uniloc 2017 LLC* decision—“the *General Plastic* factors are relevant ... even when the petition is a follow-on petition and Petitioner is not seeking an active role in the ongoing IPR.” IPR2020-00854, Paper 9 at 8 (PTAB Oct. 28, 2020) (precedential) (“*Uniloc*”); *see also Guangdong Boltpower Energy Co. v. Noco Co.*, IPR2021-00309, Paper 11 at 5-6 (PTAB May 10, 2021) (“*Guangdong*”). This is because, particularly 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. This is the kind of serial attack *General Plastic* was intended to address.” *Uniloc* at 4.

The overlapping challenged patent claims and the significant relationship between petitioners Cisco and Qualcomm both weigh in favor of the Board exercising its discretion to deny institution of the Instant Petition.

B. *General Plastic* Factor 2: Petitioner knew or should have known of the prior art asserted in the Instant Petition at the time the Cisco IPR was filed.

Petitioner does not provide any evidence that it did not have actual knowledge of the art on which it relies in the Instant Petition at the time the Cisco IPR was filed on March 19, 2024. *See* Pet. at 103-105; *Uniloc* at 9. In any event, Petitioner should have known of this art at that time because the Instant Petition is a “copy-cat” of the Samsung IPR, which was filed on February 26, 2024—*before* the Cisco IPR. *See*

supra § II; Pet. at 104.

“The relevant issue under factor 2 is ... whether the[prior art] could have been found with reasonable diligence.” *General Plastic* at 20. Here, Petitioner would not have needed to even conduct a prior art search in the traditional sense, but could rather have simply reviewed the Samsung IPR to learn of the prior art references it now asserts in the Instant Petition. Notably, the Samsung IPR was filed over three weeks before Petitioner Qualcomm’s co-RPI Cisco filed the Cisco IPR. *Compare* Ex. 2009 at 104 (Samsung IPR filed February 26, 2024) *with* Ex. 2010 at 77 (Cisco IPR filed March 19, 2024). A reasonably diligent searcher would, of course, have been able to readily locate and review the Samsung IPR, and the art contained within it, in the three-week gap between the filing of the Samsung and Cisco IPRs.

Petitioner Qualcomm should thus have known of the prior art relied upon in the Samsung IPR (and the Instant “copy-cat” Petition) by the time the Cisco IPR was filed. This weighs against institution.

C. *General Plastic* Factor 3: At the time the Instant Petition was filed, the preliminary responses in both the Cisco and Samsung IPRs had been filed.

Petitioner claims that it “could not have benefited from the POPRs in the Samsung and Cisco IPRs because it is a ‘copycat’ of a petition filed” and “no institution decisions [were] issued” at the time the Instant Petition was filed. Pet. at 104. But this does not make sense. Qualcomm would have had access to the petitions

and the preliminary responses in both the Samsung IPR and Cisco IPR well before it filed the Instant Petition. *See* Ex. 2011 at 58 (POPR in Samsung IPR filed June 14, 2024); Ex. 2008 at 53 (POPR in Cisco IPR filed June 27, 2024). These preliminary responses would have provided information “such that [Qualcomm] would have been in a position to gain a benefit from having that information before filing” the Instant Petition. *Uniloc* at 10. For example, Petitioner Qualcomm could have reviewed the petitions and preliminary responses, evaluated the merits of them, and decided which IPR it preferred to join. Factor 3 thus favors denial of institution.

D. *General Plastic* Factor 4: Over five months elapsed between when Petitioner knew or should have known of the prior art asserted in the Instant Petition, and the filing of the Instant Petition.

Petitioner Qualcomm knew or should have known of the prior art relied upon in the Samsung IPR (and the Instant “copy-cat” Petition) at least by the time the Cisco IPR was filed on March 19, 2024. *See supra* § IV.B. But Petitioner Qualcomm did not file the Instant Petition for ***over five months*** from that date. *Compare* Ex. 2010 at 77 (Cisco IPR filed March 19, 2024) *with* Pet. at 107 (dated August 28, 2024). This nearly half-year-long delay weighs in favor of the Board denying institution. *See, e.g., Valve* at 14 (“The fact that Valve waited ***five months*** after HTC’s petition to file the Petition in this case favors denying institution.”) (emphasis added).

E. General Plastic Factor 5: Petitioner does not provide an adequate explanation for the time elapsed between the filing of the Cisco IPR and the Instant Petition.

Petitioner Qualcomm claims it filed the Instant Petition “expeditiously upon Cobblestone/Samsung’s notice that ‘[a]n agreement in principle to settle the parties’ disputes is imminent.” Pet. at 104. Although Patent Owner and Samsung’s impending settlement “may have prompted” Petitioner Qualcomm to file the Petition, “it does not excuse the five-month delay between the filing of [Cisco]’s petition and [Qualcomm’s] petition.” *Valve* at 14; see also *Uniloc* at 11. There is simply no reason that Petitioner Qualcomm could not have filed the Instant Petition concurrently with or shortly after the Cisco IPR was filed.

F. General Plastic Factors 6 and 7: The finite resources of the Board, and the requirement of the Board to issue a final written decision not later than one year after institution, counsel against institution.

“In general, having multiple petitions challenging the same patent, especially when not filed at or around the same time as in this case, is inefficient and tends to waste resources.” *Valve* at 15. Petitioner Qualcomm contends the fact that it filed a “copycat” petition and “agree[s] to take an understudy role” will help “conserve the Board’s resources.” Pet. at 105. But Petitioner Qualcomm has made clear that “[i]n the event that the Samsung IPR is terminated with respect to Samsung, then Qualcomm does intend to ‘step into the shoes’ of the dismissed petitioner and materially participate in the joined proceedings.” Joinder Motion at 5.

“Although a joinder request is usually an efficient mechanism by which to become a petitioner in an IPR,” that is not so where a petitioner “would stand in to continue a proceeding that would otherwise be terminated.” *Uniloc* at 12. And here, Samsung’s settlement is not just a possibility—Samsung and Patent Owner have already settled and filed a motion to terminate the Samsung IPR. Ex. 2005; *see also T-Mobile* at 13; *Guangdong* at 11. Indeed, this settlement is in fact what Petitioner Qualcomm admits prompted it to file the Instant Petition. Pet. at 104. Perhaps Qualcomm and its co-RPI are unhappy with the challenges posed in the pending Cisco IPR, and felt compelled to join what they viewed as stronger grounds in the Samsung IPR. Or perhaps they simply want to have two bites at the apple, keeping the challenges of both the Samsung and Cisco IPRs alive before the Board. Whatever the reasoning behind the filing of the Instant Petition, “[t]hese serial and repetitive attacks implicate the efficiency concerns underpinning *General Plastic*, and, thus, favor denying institution.” *Valve* at 15.

* * *

Each of the seven *General Plastic* factors weigh in favor of the Board exercising its discretion to deny institution.

V. Conclusion

For the foregoing reasons, Patent Owner respectfully requests that the Board deny Petitioner’s motion for joinder as moot and deny institution of the Petition.

Date: December 11, 2024

/Amy E. Hayden/
Reza Mirzaie, Reg. No. 69,138
Amy E. Hayden, Reg. No. 64,817
Neil Rubin, Reg. No. 67,030
Peter Tong, Reg. No. 74,292
Russ, August & Kabat
12424 Wilshire Blvd. 12th Floor
Los Angeles, CA 90025

Counsel for Patent Owner

CERTIFICATION REGARDING WORD COUNT

Pursuant to 37 C.F.R. §42.24(d), Patent Owner certifies that there are 3,216 words in the paper excluding the portions exempted under 37 C.F.R. §42.24(a)(1).

Date: December 11, 2024

/Amy E. Hayden/
Reza Mirzaie, Reg. No. 69,138
Amy E. Hayden, Reg. No. 64,817
Neil Rubin, Reg. No. 67,030
Peter Tong, Reg. No. 74,292
Russ, August & Kabat
12424 Wilshire Blvd. 12th Floor
Los Angeles, CA 90025

Counsel for Patent Owner

CERTIFICATE OF SERVICE (37 C.F.R. § 42.6(e)(1))

The undersigned hereby certifies that the above document was served on December 11, 2024, by filing this document through the Patent Trial and Appeal Case Tracking System (P-TACTS) as well as delivering a copy via electronic mail upon the following attorneys of record for the Petitioner:

Kyrie K. Cameron (Reg. No. 77,380)
Randol Wayne Read (Reg. No. 43,876)
PATTERSON + SHERIDAN LLP
24 Greenway Plaza, Suite 1600
Houston, TX 77046
kcameron@pattersonsheridan.com
rread@pattersonsheridan.com
Tel: 713-623-4844
Fax: 713-623-4846

Date: December 11, 2024

/Amy E. Hayden/
Reza Mirzaie, Reg. No. 69,138
Amy E. Hayden, Reg. No. 64,817
Neil Rubin, Reg. No. 67,030
Peter Tong, Reg. No. 74,292
Russ, August & Kabat
12424 Wilshire Blvd. 12th Floor
Los Angeles, CA 90025

Counsel for Patent Owner