

**UNITED STATES PATENT AND TRADEMARK OFFICE**

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**BEFORE THE PATENT TRIAL AND APPEAL BOARD**

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COMCAST CABLE COMMUNICATIONS, LLC,  
Petitioner,

v.

ENTROPIC COMMUNICATIONS, LLC,  
Patent Owner.

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CASE: IPR2025-00185  
U.S. PATENT NO. 9,866,438

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**PATENT OWNER'S BRIEF IN SUPPORT OF DISCRETIONARY DENIAL**

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**PATENT OWNER'S LIST OF EXHIBITS**

<b>Exhibit No.</b>	<b>Description</b>
Ex. 2001	U.S. Patent No. 10,135,682 (“the ’682 Patent”)
Ex. 2002	Certified File History of U.S. Patent No. 10,135,682
Ex. 2003	PTAB Multiple Petitions Study Executive Summary (FY 2021-FY 2022 Update)
Ex. 2004	PTAB Multiple Petitions Study (FY 2021-FY 2022 Update)
Ex. 2005	Ryan Davis, <i>Acting USPTO Leader Says New Policies Will Bolster Patents</i> , published by Law360 (Apr. 1, 2025)
Ex. 2006	Table of Parallel Petitions Filed by Comcast (As Petitioner or RPI) (2016-2025)
Ex. 2007	<i>Entropic Communications, LLC v. Comcast Corp.</i> , 2:23-cv-01050, Dkt. 1 (C.D. Cal. Feb. 10, 2023) (Complaint for Patent Infringement)
Ex. 2008	<i>Entropic Communications, LLC v. Cox Communications, Inc.</i> , 2:23-cv-01049, Dkt. 95 (C.D. Cal. Oct. 16, 2023) (Order Granting Stipulation to Consolidate Cases)
Ex. 2009	<i>Entropic Communications, LLC v. Cox Communications, Inc.</i> , 2:23-cv-01049, Dkt. 114 (C.D. Cal. Nov. 13, 2023) (Motion for Leave to Amend)
Ex. 2010	<i>Entropic Communications, LLC v. Cox Communications, Inc.</i> , 2:23-cv-01049, Dkt. 143 (C.D. Cal. Dec. 15, 2023) (Motion for Leave to Amend)
Ex. 2011	<i>Entropic Communications, LLC v. Cox Communications, Inc.</i> , 2:23-cv-01049, Dkt. 143-3 (C.D. Cal. Dec. 15, 2023) (Redacted Proposed 3d Amended Complaint Against Comcast)

## Patent Owner's Brief in Support of Discretionary Denial

<b>Exhibit No.</b>	<b>Description</b>
Ex. 2012	<i>Entropic Communications, LLC v. Cox Communications, Inc.</i> , 2:23-cv-01049, Dkt. 143-24 (C.D. Cal. Dec. 15, 2023) ('438 Patent Exemplary Infringement Chart)
Ex. 2013	<i>Entropic Communications, LLC v. Cox Communications, Inc.</i> , 2:23-cv-01049, Dkt. 277 (C.D. Cal. Mar. 6, 2024) (Special Master's Report and Recommendation)
Ex. 2014	<i>Entropic Communications, LLC v. Cox Communications, Inc.</i> , 2:23-cv-01049, Dkt. 366 (C.D. Cal. Feb. 12, 2025) (Order Conditionally Granting Comcast's Motion to Stay)
Ex. 2015	<i>Entropic Communications, LLC v. Cox Communications, Inc.</i> , 2:23-cv-01049, Dkt. 367 (C.D. Cal. Feb. 21, 2025) (Notice by Cox)
Ex. 2016	<i>Entropic Communications, LLC v. Cox Communications, Inc.</i> , 2:23-cv-01049, Dkt. 371 (C.D. Cal. Mar. 7, 2025) (Joint Report)
Ex. 2017	Lex Machina Court Statistics for Judge Holcomb (accessed Apr. 27, 2025)
Ex. 2018	USPTO Guidance on USPTO's Recission of "Interim Procedure for Discretionary Denials in AIA Post-Grant Proceedings with Parallel District Court Litigation" (March 24, 2025) ("March 24, 2025 Guidance")
Ex. 2019	USPTO Memorandum re Interim Processes for PTAB Workload Management (March 26, 2025) ("March 26, 2025 Memorandum")

Patent Owner Entropic Communications, LLC (“Patent Owner”) respectfully requests that the Board exercise its discretion to deny institution of the Petition in IPR2025-00185, as well as the two parallel petitions filed by Comcast Cable Communications, LLC (“Petitioner”) in IPR2025-00183 and -00184, all of which challenge the patentability of claims 1-18 of U.S. Patent No. 9,866,438 (“the ’438 Patent”). *Comcast Cable Communications, LLC v. Entropic Communications, LLC*, IPR2025-00183, Paper 2 (P.T.A.B. Dec. 6, 2024); IPR2025-00184, Paper 2 (P.T.A.B. Dec. 6, 2024); IPR2025-00185, Paper 2 (P.T.A.B. Dec. 6, 2024).

On March 26, 2025, the Acting Director of the USPTO issued a memorandum entitled “Interim Processes for PTAB Workload Management” (Ex. 2019, “March 26, 2025 Memorandum”) permitting parties to file separate briefing on requests for discretionary denial of institution, *e.g.*, pursuant to 35 U.S.C. § 314(a). *See also* Paper 7, Notice Extending Deadline for Discretion Briefing. Consistent with the policies and procedures outlined in that Memorandum, as well as in the USPTO’s March 24, 2025 “Guidance on USPTO’s rescission of ‘Interim Procedure for Discretionary Denials in AIA Post-Grant Proceedings with Parallel District Court Litigation’” (Ex. 2018, “March 24, 2025 Guidance”) the Board should exercise its discretion to deny these petitions.

## I. SUMMARY OF REASONS FOR DISCRETIONARY DENIAL

The Board should exercise its discretion to deny this and the other two petitions on the '438 Patent because the Board has already *twice* denied institution on another member of the same patent family, having similar challenged claims, over all of the same primary references. That effectively makes these three cases Petitioner's third, fourth, and fifth challenges against the claimed subject matter.

Ten months before filing these cases, Petitioner filed two petitions for *inter partes* review of U.S. Patent No. 10,135,682 ("the '682 Patent"). *Comcast Communications, LLC v. Entropic Communications, LLC*, IPR2024-00444, Paper 2 (P.T.A.B. Feb. 15, 2024); IPR2024-00445, Paper 2 (P.T.A.B. Feb. 15, 2024). The '682 Patent is a continuation of the '438 Patent and has similar claims. Not only that, those two earlier challenges were based on much of the same prior art and arguments—including the same primary references and same tertiary references. In both of those earlier proceedings, the Board *denied* institution on the merits, finding Petitioner had failed to demonstrate reasonable likelihood of prevailing.

Petitioner's three new cases are no more than a third, fourth, and fifth bite at the apple, which do little more than drain the Board's resources and game the system for strategic advantage. These three cases seek to overwhelm the Board with **68 separate grounds** of invalidity, on top of the **34 separate grounds** already presented in the prior two petitions on the '682 Patent. These filings are part of a longer pattern



of behavior by Petitioner as a serial filer of parallel petitions against Patent Owner's patents, a practice that the Office has emphasized is rarely appropriate. Petitioner's filings also gain an unfair strategic advantage because Petitioner delayed filing these petitions on the '438 Patent until after receiving institution decisions on the petitions on the '682 Patent. As a result, Petitioner has the benefit of already knowing Patent Owner's counterarguments to Petitioner's primary references and the Board's predisposition on Petitioner's prior analysis and failings. Petitioner tries to address those prior failings, but (as will be detailed in the forthcoming POPRs) has not succeeded.

At base, Petitioner's filings are no more than improper serial petitions which should be rejected the same as if they were the third, fourth, and fifth petitions filed on the '682 Patent. Petitioner needs to learn to take no for an answer. The Board should deny institution.

## **II. DISCRETIONARY DENIAL IS WARRANTED UNDER § 325(d)**

The petitions should be denied pursuant to 35 U.S.C. § 325(d) because they seek reconsideration of art and arguments already reviewed by the Office. Under the framework established in *Advanced Bionics*, denial is warranted where “(1) the same or substantially the same prior art was previously presented to the Office or (2) the same or substantially the same arguments were previously presented to the Office.” *Advanced Bionics, LLC v. MED-EL Elektromedizinische Geräte GmbH*,

IPR2019-01469, Paper 6, 8 (P.T.A.B. Feb. 3, 2020) (precedential); *see also Becton, Dickinson & Co. v. B. Braun Melsungen AG*, IPR2017-01586, Paper 8, pp. 17–18 (P.T.A.B. Dec. 15, 2017) (precedential).

This inquiry is not limited to art and arguments that were evaluated in the context of the same patent. The Board has explained that “[c]onsideration of the asserted prior art by the Office during previous examination of the patent at issue or closely related patents is, therefore, a relevant consideration under Section 325(d).” *ZTE (USA) Inc. v. Fractus, S.A.*, IPR2018-01457, Paper 20, 5 (P.T.A.B. Oct. 4, 2019) (emphasis added); *see also Advanced Bionics*, IPR2019-01469, Paper 6, 10 (confirming the relevance of “prior art previously presented to the Office during *any* proceeding, including prior AIA proceedings”).

The '438 Patent is closely related to the '682 Patent, the latter being a continuation of the '438 Patent and having similar claims. The Board previously considered, and denied institution of, two petitions for *inter partes* review of the '682 Patent that were both filed by Petitioner. *See Comcast Cable Communications, LLC v. Entropic Communications, LLC*, IPR2024-00444, Paper 9 (P.T.A.B. Sept. 6, 2024); IPR2024-00445, Paper 9 (P.T.A.B. Sept. 9, 2024). Those petitions raised similar arguments and many of the same prior art references as in the three IPR petitions that Petitioner has now filed against the '438 Patent. In particular, the current petitions and the earlier petitions all use the same primary references:

“Cooper,” “Prodan,” and “Thibeault.” While the current petitions introduce new secondary references to attempt to fill the holes that the Board identified in the earlier petitions, some of these new secondary references were already considered during prosecution of the '438 Patent. Petitioner is thus combining primary references considered (and rejected) in the '682 Patent IPRs with secondary references considered (and rejected) during the '438 Patent's prosecution. Accordingly, the Board should exercise its discretion to deny institution.

**A. The '682 Patent is Closely Related to the '438 Patent**

The '682 Patent is a direct continuation of the '438 Patent. *See* Ex. 2001 (“the '682 Patent”), p. 1. Both patents have similar claims, as demonstrated below with respect to independent claims 1 and 10 (with differences in claim language indicated in bold and underline).

'438 Patent	'682 Patent
<p>1. A method comprising:</p> <p>determining, by a cable modem termination system (CMTS), for <u>a plurality of cable modems</u> served by said CMTS, a corresponding <u>plurality of</u> signal-to-noise ratio (SNR) related metrics;</p> <p>assigning, by said CMTS, <u>said plurality of cable modems</u> among a plurality of service groups based on <u>said plurality</u> of SNR-related metrics;</p>	<p>1. A method comprising:</p> <p>determining, by a cable modem termination system (CMTS), for <u>each cable modem</u> served by said CMTS, a corresponding signal-to-noise ratio (SNR) related metric;</p> <p>assigning, by said CMTS, <u>each cable modem</u> among a plurality of service groups based on <u>a respective corresponding</u> SNR-related metric;</p>

'438 Patent	'682 Patent
<p>generating, by said CMTS for each one of said plurality of service groups, a composite SNR-related metric based at least in part on a worst-case SNR profile of said <b><u>plurality of</u></b> SNR-related metrics corresponding to said one of said plurality of service groups;</p> <p>selecting, by said CMTS, physical layer communication parameters to be used for communicating with said one of said plurality of service groups based on said composite SNR-related metric; and</p> <p>communicating, by said CMTS, with <b><u>a portion of said plurality of</u></b> cable modems corresponding to said one of said plurality of service groups using said selected physical layer communication parameters.</p>	<p>generating, by said CMTS for each one of said plurality of service groups, a composite SNR-related metric based at least in part on a worst-case SNR profile of said SNR-related metrics corresponding to said one of said plurality of service groups;</p> <p>selecting, by said CMTS, <b><u>one or more</u></b> physical layer communication parameter to be used for communicating with said one of said plurality of service groups based on said composite SNR-related metric; and</p> <p>communicating, by said CMTS, with <b><u>one or more</u></b> cable modems corresponding to said one of said plurality of service groups using said selected <b><u>one or more</u></b> physical layer communication parameter.</p>
<p>10. A system comprising: circuitry for use in a cable modem termination system (CMTS), said circuitry comprising a network interface and a processor wherein:</p> <p>said processor is configured to determine, for <b><u>a plurality of cable modems</u></b> served by said CMTS, a corresponding <b><u>plurality of</u></b> signal-to-noise ratio (SNR) related metrics;</p> <p>said processor is configured to assign <b><u>said plurality of</u></b> cable modems among</p>	<p>10. A system comprising: circuitry for use in a cable modem termination system (CMTS), said circuitry comprising a network interface and a processor wherein:</p> <p>said processor is configured to determine, for <b><u>each cable modem</u></b> served by said CMTS, a corresponding signal-to-noise ratio (SNR) related metric;</p> <p>said processor is configured to assign <b><u>each of said</u></b> cable modems among a</p>

'438 Patent	'682 Patent
<p>a plurality of service groups based on <b><u>said plurality of</u></b> SNR-related metrics;</p> <p>said processor is configured to generate, for each one of said plurality of service groups, a composite SNR-related metric based at least in part on a worst-case SNR profile of said <b><u>plurality of</u></b> SNR-related metrics corresponding to said one of said plurality of service groups;</p> <p>said processor is configured to select physical layer communication parameters to be used for communicating with said one of said plurality of service groups based on said composite SNR-related metric; and</p> <p>said network interface is configured to communicate with <b><u>a portion of said plurality of</u></b> cable modems corresponding to said one of said plurality of service groups using the selected physical layer communication parameters.</p>	<p>plurality of service groups based on <b><u>a respective corresponding</u></b> SNR-related metric;</p> <p>said processor is configured to generate, for each one of said plurality of service groups, a composite SNR-related metric based at least in part on a worst-case SNR profile of said SNR-related metrics corresponding to said one of said plurality of service groups;</p> <p>said processor is configured to select <b><u>one or more</u></b> physical layer communication parameter to be used for communicating with said one of said plurality of service groups based on said composite SNR-related metric; and</p> <p>said network interface is configured to communicate with <b><u>one or more</u></b> cable modems corresponding to said one of said plurality of service groups using the one or more selected physical layer communication parameter.</p>

Ex. 1201 (“the ’438 Patent”), cls. 1, 10; ’682 Patent, cls. 1, 10. As shown above, the ’438 and ’682 Patents both claim methods and systems involving a cable modem termination system (CMTS). Both sets of independent claims recite similar “determining,” “assigning,” “generating,” “selecting,” and “communicating”

elements. The similarities also extend to the dependent claims. *Compare* '438 Patent, cls. 2–9, 11–18 *with* '682 Patent, cls. 2–9, 11–18.

Highlighting the similarities of the claims of the two patents, the Examiner on the '682 Patent issued a non-statutory double patenting rejection based on claims 1–18 of the '438 Patent. *See* Ex. 2002, 78. The Examiner reasoned that “the ['682 Patent] merely broadens the scope of the claim 1 of the ['438 Patent] by eliminating the elements and their respective functions of the claims” indicated by the Examiner in the rejection. *Id.* at 78–79. To overcome the rejection, the applicant disclaimed the terminal part of the statutory term of the '682 Patent that would extend beyond the expiration date of the full statutory term of '438 Patent. Ex. 2002, 122. Accordingly, the Board's previous analysis of the '682 Patent in IPR2024-00444 and IPR2024-00445 is highly relevant to the merits of the current petitions.

**B. The Petitions Raise Similar Grounds to Those Rejected in IPR2024-00444 and IPR2024-00445**

In Petitioner's earlier challenges on the '682 Patent, Petitioner relied on three primary references: “Cooper,” “Prodan,” and “Thibeault.” IPR2024-00444, Paper 2, 7–8 (Cooper and Prodan); IPR2024-00445, Paper 2, 14–15 (Thibeault). In each case, Petitioner conceded that the primary reference did not teach limitation [1D], which includes the requirement, “generating ... a composite SNR-related metric based at least in part on a worst-case SNR profile.” IPR2024-00444, Paper 2, pp.

19, 28, 52, 57; IPR2024-00445, Paper 2, pp. 24, 33, 38. And in each case, Petitioner attempted to fill that hole using one of three alternative secondary references: “Saey,” “Gross,” and “Cioffi.” *Id.* The remaining grounds supplemented these two combinations with additional references Monk, Cooper437, Jalali, Cooper, Pai, and Monk802. IPR2024-00444, Paper 2, 7–8; IPR2024-00445, Paper 2, 14–15.

The Board *denied* institution of both the -00444 and -00445 IPRs because it was “not persuaded that Petitioner has shown with sufficient particularity why either Saey, Gross, or Cioffi disclose or suggest ‘generating ... a composite SNR-related metric based at least in part on a worst-case SNR profile,’ as required by element [1D]. IPR2024-00445, Paper 9, 24–25 (P.T.A.B. Sept. 9, 2024); *see also* IPR2024-00444, Paper 9, 22 (P.T.A.B. Sept. 6, 2024).

Three months after receiving those decisions denying institution, Petitioner filed the instant petitions on the ’438 Patent. Once again, Petitioner relies on the same three primary references of Cooper, Prodan, and Thibeault. IPR2025-00183, Paper 2, 13 (Cooper); IPR2025-00184, Paper 2, 14–15 (Prodan); IPR2025-00185, Paper 2, 14–15 (Thibeault). Only this time, Petitioner has dropped Saey, Gross, and Cioffi as the secondary references and replaced them with Cooper840, Azenkot, and Currivan. *E.g.*, IPR2025-00183, Paper 2, p. 13; IPR2025-00184, Paper 2, pp. 14–15; IPR2025-00185, Paper 2, pp. 14–15. Even the supplemental references are the same, consisting of Monk, Cooper437, Jalali, Cooper, Pai, and Monk802. *E.g.*,

IPR2025-00183, Paper 2, 13; IPR2025-00184, Paper 2, 14–15; IPR2025-00185, Paper 2, 14–15.

The charts below compare the art and arguments raised in both sets of petitions, with the similarities indicated by bold and underline:

IPR2025-00183 (’438 Patent) (Dec. 6, 2024)		IPR2024-00444 (’682 Patent) (Feb. 15, 2024)	
Ground A	<u>Cooper</u> + Cooper840	<u>Cooper</u> + Saey	Ground A
Ground B	<u>Cooper</u> + Azenkot	<u>Cooper</u> + Gross	Ground B
Grounds C-D	<u>Adding Monk</u>	<u>Adding Monk</u>	Grounds C-D
Grounds E-F	<u>Adding Cooper437</u>	<u>Adding Cooper437</u>	Grounds E-F
Grounds G-L	Adding Curriuan	---	---



IPR2025-00184 (’438 Patent) (Dec. 6, 2024)		IPR2024-00444 (’682 Patent) (Feb. 15, 2024)	
Ground A	<b><u>Prodan</u></b> + Cooper840	<b><u>Prodan</u></b> + Saey	Ground G
Ground B	<b><u>Prodan</u></b> + Azenkot	<b><u>Prodan</u></b> + Gross	Ground H
Grounds C-D	<b><u>Adding Jalali</u></b>	<b><u>Adding Jalali</u></b>	Grounds I-J
Grounds E-F	<b><u>Adding Cooper</u></b>	<b><u>Adding Cooper</u></b>	Grounds K-L
Grounds G-H	<b><u>Adding Monk &amp; Cooper437</u></b>	<b><u>Adding Monk &amp; Cooper437</u></b>	Grounds M-N
Grounds I-P	<b><u>Adding Pai</u></b>	<b><u>Adding Pai</u></b>	Grounds O-V
Grounds Q-FF	Adding Currivan	---	---

IPR2025-00185 (’438 Patent) (Dec. 6, 2024)		IPR2024-00445 (’682 Patent) (Feb. 15, 2024)	
Ground A	<b><u>Thibeault</u></b> + Cooper840	<b><u>Thibeault</u></b> + Saey	Ground A
Ground B	<b><u>Thibeault</u></b> + Azenkot	<b><u>Thibeault</u></b> + Gross	Ground B
---	---	Thibeault + Cioffi	Ground C
Grounds C-D	<b><u>Adding Cooper</u></b>	<b><u>Adding Cooper</u></b>	Grounds D-F
Grounds E-F, I-L	<b><u>Adding Monk802</u></b>	<b><u>Adding Monk802</u></b>	Grounds G-I
Grounds G-H	<b><u>Adding Monk &amp; Cooper437</u></b>	<b><u>Adding Monk &amp; Cooper437</u></b>	Grounds J-L
Grounds M-X	Adding Currivan	---	---

Not only do many of Petitioner's references overlap, Petitioner also uses its new secondary references (Cooper840, Azenkot, and Currivan) in substantially the same way that Petitioner used Saey, Gross, and Cioffi in the -00444 and -00445 petitions. Cooper840 and Azenkot are cited for the narrow purpose of allegedly supplying the missing claim limitation [1D], specifically for the requirement of "generating ... a composite SNR-related metric based at least in part on a worst-case SNR profile," which exists in both the '438 and '682 Patents. And Currivan is cited to be responsive to Patent Owner's POPRs in the '682 Patent IPRs to fill a hole that Petitioner's primary references do not fill in claim element [1E].

In short, Petitioner had its chance—two chances, in fact. Petitioner raised 34 total invalidity grounds across the IPR2024-00444 and -00445 petitions on the '682 Patent. Patent Owner filed preliminary responses addressing Petitioner's arguments, and the Board made specific findings identifying the shortcomings in Petitioner's theories. Armed with that knowledge, Petitioner now attempts a do-over, swapping in Cooper840 and Azenkot as the next best references for element [1D], adding Currivan to attempt to address Petitioner's prior failings on element [1E], and keeping everything else the same.

Petitioner's serial filings present an undue burden on Patent Owner and the Board. Patent Owner must respond to the new petitions, the Board must review the Petitions, POPRs, and other pre-institution papers, and the Board must spend its time

writing a decision on institution—three separate decisions, in fact, on top of the two it already wrote on the '682 Patent.

But not only is Petitioner's serial-filing strategy burdensome, it harnesses an unfair advantage for Petitioner by giving Petitioner a roadmap of Patent Owner's and the Board's analysis of the critical issues. *See Masimo Corp. v. Apple Inc.*, IPR2024-00071, Paper 7, 19–20 (P.T.A.B. Apr. 25, 2024) (raising concerns of “road mapping” where Petitioner filed the instant petition after receiving Patent Owner's preliminary response and the Board's institution decision in a related IPR against the same patent); 21 (“The new embodiments relied on and modified arguments addressing claim 1 of the '257 patent suggest that Petitioner is using the prior proceedings as a roadmap to address issues to its first petition in the 745 IPR. Accordingly, this factor weighs strongly in favor of invoking our discretion to deny institution.”); *see also Aylo FreeSites Ltd. v. Dish Technologies LLC*, IPR2024-00513, Paper 13, 16 (P.T.A.B. Aug. 13, 2024) (“Petitioner had the benefit of Patent Owner's substantive arguments in closely related proceedings”). In multiple ways, then, Petitioner's strategy and filings are improper. For this reason and the many that follow, the Board should deny institution.

**C. The Petitions Rely on Art That Was Previously Considered During Prosecution of the '438 Patent**

Although it *appears* that Petitioner has introduced new art and new arguments in the form of Cooper840, Azenkot, and Currivan, the fact is two of these references were already considered by the Examiner during prosecution of the '438 Patent. *See* '438 Patent, p. 2 (identifying Currivan and Azenkot as references that were cited by the Examiner). These references may be new for Petitioner, but they are not new for the Office.

Not only were Petitioner's primary references already considered in the '682 Patent IPRs, Petitioner's primary reference in IPR2025-00184 (Prodan) received considerable attention during prosecution of both the '438 and '682 Patents. The Examiner initially rejected the claims during prosecution of the '438 Patent based on Prodan in combination with other references. *See* Ex. 1204, 75–93. But the Applicant was able to overcome that rejection by amending the claims. *See id.* at 153–54. Later, during prosecution of the '682 Patent, the Examiner issued an initial rejection based on non-statutory double patenting, as previously discussed. During that same rejection, however, the Examiner expressly indicated that the claims would be allowable over Prodan, even in combination with another reference Richardson. *See* Ex. 2002, 85–88. Taking together the prosecution of the '438 Patent, the prosecution of the '682 Patent, and Petitioner's earlier -00444 IPR

petition against the '682 Patent, this current set of petitions would be at least the *fourth* time the Office is asked to consider validity of the claims using Prodan as a primary reference.

**D. Petitioner Has Not Demonstrated Material Error by the Office**

If it is determined that the same or substantially the same art or arguments were previously presented to the Office, then the Board next considers whether the Petitioner has demonstrated a material error in the Office's prior analysis. *See Advanced Bionics*, IPR2019-01469, Paper 6, 8. If the Petitioner fails to make this showing, then the Director generally will exercise discretion not to institute *inter partes* review. *Id.* at 8–9. Examples of relevant factors include:

- the extent to which the asserted art was evaluated during examination, including whether the prior art was the basis for rejection;
- whether petitioner has pointed out sufficiently how the examiner erred in its evaluation of the asserted prior art; and
- the extent to which additional evidence and facts presented in the petition warrant reconsideration of the prior art or arguments.

*Id.* at 9–10; *see also id.* at n. 10.

Petitioner has not shown any material error in the Office's prior analysis. The Board previously considered Cooper, Prodan, and Thibeault during Petitioner's '682 Patent challenges. Prodan had been thoroughly considered even before that and was

explicitly cited in prosecution of the '438 Patent as a basis for rejection. Furthermore, the “additional evidence and facts presented in the petition” do not warrant reconsideration because two of those additional pieces of art (Azenkot and Currivan) were already considered during prosecution of the '438 Patent. Finally, Petitioner has made hardly any effort to explain *how* the Board erred in its several prior analyses. All that Petitioner offers is a single boilerplate sentence, arguing that “the Examiner materially erred (i) by not applying the prior art relied on herein, and (ii) by failing to recognize that (as described below) the prior art taught the claim element added by amendment.” IPR2025-00185, Paper 2, 17; *see generally Advanced Bionics*, IPR2019-01469, Paper 6, 9 (“If reasonable minds can disagree regarding the purported treatment of the art or arguments, it cannot be said that the Office erred in a manner material to patentability.”).

Accordingly, Petitioner has not shown that the Office materially erred in any of its previous examinations of the '438 and '682 Patents, including both *inter partes* review challenges to the '682 Patent, and in particular during prosecution when all three of Prodan, Azenkot, and Currivan were considered. The Board should therefore exercise its discretion under § 325(d) to deny institution.

### **III. DISCRETIONARY DENIAL IS WARRANTED UNDER § 314(a)**

As explained in the March 26, 2025 Memorandum, the Director has broad discretion to deny institution under 35 U.S.C. § 314(a). *See* Ex. 2019. In addition

to the considerations enumerated in precedential decisions such as *Fintiv* and *General Plastic*, the Board will consider “all relevant considerations” bearing on the Director’s discretion. These include, but are not limited to, various specifically identified factors, *e.g.*, whether the PTAB has already adjudicated the validity or patentability of the challenged patent claims, whether there have been changes in the law, the strength of the unpatentability challenge and the Petitioner’s reliance on expert testimony, the length of time the claims have been in force, and any other considerations. Many of these factors are relevant here and provide further support in favor of discretionary denial.

**A. Petitioner Has Burdened Patent Owner and the Board by Filing Serial Parallel Petitions**

Petitioner has filed *three* separate petitions challenging the ’438 Patent. Across all three petitions, there are **68 total grounds** for alleged invalidity. Since at least July 2019, the Office has made clear that this practice is heavily disfavored. As the Office has explained, one “petition should be sufficient to challenge the claims of a patent in most situations,” “multiple petitions by a petitioner are not necessary in the vast majority of cases,” institution on even two parallel petitions should be “rare,” and three petitions from a petitioner is “unlikely” to ever be “appropriate.” Trial Practice Guide Update (July 2019), 26; *see also* Consolidated Trial Practice Guide (Nov. 2019), 59 (same).

As the Trial Practice Guide explains, filing multiple petitions against the same patent “at or about the same time ... may place a substantial burden on the Board and the patent owner and could raise fairness, timing, and efficiency concerns.” *Id.* Even more recently, in a Notice of Proposed Rulemaking, the Office has reiterated “the Office’s goal of reducing duplicative challenges to a patent and ... preventing undue harassment of patent owners through the filing of multiple challenges to a patent.”<sup>1</sup> *See also Comcast Cable Communications, LLC v. Rovi Guides, Inc.*, IPR2019-00224, Paper 10, 3 (P.T.A.B. Apr. 3, 2019) (observing that “multiple, concurrent proceedings per patent represents a significant burden for the Board”).

The Office yet again reaffirmed this policy in July 2023, stating in its Multiple Petitions Study (FY 2021-FY 2022 Update) that “most patents are challenged by only one petition” and that “institution of AIA trials based on multiple petitions are” and “should be” “rare.” *See Ex. 2003 (Multiple Petitions Study Executive*

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<sup>1</sup> Patent Trial and Appeal Board Rules of Practice for Briefing Discretionary Denial Issues, and Rules for 325(d) Considerations, Instituting Parallel and Serial Petitions, and Termination Due to Settlement Agreement. Federal Register, Vol. 89, No. 77, 28,693 at 28,699 (April 19, 2024).



Summary).<sup>2</sup> A majority of the time when parallel petitions have been permitted, moreover, it has been because the patent owner did not contest the filing of multiple petitions. Ex. 2004 (Multiple Petitions Study)<sup>3</sup> 14 (finding that 70% of allowed parallel petitions in 2021 and 54% in 2022 were allowed because “Patent Owner did not contest” those parallel petitions).

Petitioner's parallel and serial filings here are particularly burdensome given Petitioner's extensive history, and continued practice, of filing parallel petitions. Prior to the July 2019 Trial Practice Guide Update, Petitioner directly filed 100 petitions, 90 of which were parallel petitions. *See* Ex. 2006. These 90 parallel petitions comprised 27 sets of petitions, each set challenging an individual patent—an average 3.3 IPRs per patent. *Id.* Even prior to the 2019 Guidance, the Board exercised its discretion to deny most of these parallel petitions. *See, e.g., Comcast Cable Communications, LLC v. Rovi Guides, Inc.*, IPR2019-00279, Paper 10, 6 (July

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<sup>2</sup> Available at:

[https://www.uspto.gov/sites/default/files/documents/executive\\_summary\\_ptab\\_multiple\\_petitions\\_study\\_fy2021-2022\\_update.pdf](https://www.uspto.gov/sites/default/files/documents/executive_summary_ptab_multiple_petitions_study_fy2021-2022_update.pdf)

<sup>3</sup> Available at:

[https://www.uspto.gov/sites/default/files/documents/ptab\\_multiple\\_petitions\\_study\\_fy2021-2022\\_update.pdf](https://www.uspto.gov/sites/default/files/documents/ptab_multiple_petitions_study_fy2021-2022_update.pdf)

1, 2019) (“we are not persuaded by Petitioner that institution of additional, concurrent proceedings would promote the efficient administration of the Office or the integrity of the system”).

After the issuance of the July 2019 Trial Practice Guide Update, one would have expected Petitioner to move away from its practice of filing serial petitions. Instead, during the following 10-month period, Petitioner filed 46 IPR petitions, *every single one of which was a parallel petition*. Ex. 2006. In most of these cases, Petitioner continued its practice of filing 3+ petitions against an individual patent. *Id.* And in one case, Petitioner filed *five* separate petitions against a single patent. *Id.*

More recently, Petitioner has used this strategy extensively against Patent Owner. In a one-year period between December 2023 – December 2024, Petitioner filed 23 total petitions against Patent Owner, 17 of which were parallel petitions, and all of those petitions were to challenge only 6 patents. Ex. 2006. This multiplicity amounts to a substantial and unfair burden on both Patent Owner and the Office. *See Comcast Cable Communications, LLC v. Rovi Guides, Inc.*, IPR2019-00224, Paper 10, 3 (P.T.A.B. Apr. 3, 2019) (observing that “multiple, concurrent proceedings per patent represents a significant burden for the Board” and “when there are other related patents also challenged by multiple petitions at the same time ... this can

undermine the Office's ability to complete proceedings in a timely manner and may place an unfair burden on the Patent Owner").

The Board should not entertain Petitioner's practice any longer. Petitioner's strategy of inundating Patent Owner and the Board with parallel and serial petitions and excessive numbers of grounds is inappropriate and weighs in favor of discretionary denial.

**B. Petitioner Has Burdened Patent Owner and the Board by Its Voluminous and Excessive Number of Grounds in the Instant Petitions**

The Board has stated that "where a petition contains voluminous or excessive grounds, ... [t]he panel will evaluate the challenges and determine whether, in the interests of efficient administration of the Office and integrity of the patent system (*see* 35 USC § 316(b)), the entire petition should be denied under 35 USC § 314(a)." *Adaptics Ltd. v. Perfect Company*, IPR2018-01596, Paper 20, 17–18 (P.T.A.B. Mar. 6, 2019) (informative) ("*Adaptics*").<sup>4</sup>

Following this guidance, the Board has routinely rejected petitions that raise

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<sup>4</sup> *Adaptics* cites to a Q&A document released by the Office on Jun 5, 2018, concerning the Supreme Court's decision in *SAS Institute Inc. v. Iancu*, 138 S. Ct. 1348, 1355 (2018). The original document, titled *SAS Q&As*, is no longer accessible through the USPTO website.

voluminous and excessive grounds. The Board's informative-designated *Adaptics* decision on petitions raising "voluminous and excessive grounds" is instructive. *Id.* ("we agree with Patent Owner that the Petition suffers from a lack of particularity that results in voluminous and excessive grounds."); *see also Uber Technologies, Inc. v. Surgetech LLC*, IPR2023-00738, Paper 8 (P.T.A.B. Oct. 23, 2023) ("Following *Adaptics*, the Board has consistently denied petitions that asserted inordinately large numbers of ambiguous grounds.") (collecting cases).

In *Adaptics*, the Board found that even if the petitioner raised just "seventeen possible combinations," that would "yield[] an unduly burdensome number of combinations." *Adaptics*, 19 ("...Petitioner's contention encompasses nine combinations with Bendel and another eight distinct combinations with Sartorius, **for a total of seventeen possible combinations.** Even that conservative interpretation of Petitioner's contention **yields an unduly burdensome number of combinations.**"); *see also Energysource Minerals, LLC, v. Terralithium LLC*, IPR2019-01607, Paper 10, 13 (P.T.A.B. May 4, 2020) (similar).

Thus, under the precedent of *Adaptics*, even "seventeen possible combinations" may be "an unduly burdensome number." Here, Petitioner has a similarly voluminous number of combinations for a total of 24 separate grounds ("A" through "X"), involving eight separate references, challenging claims 1-18. *See* Petition, 14-15. All these grounds must be instituted for review, or none. *See*

*SAS Inst., Inc. v. Iancu*, 584 U.S. 357, 363 (2019).

Given the required all-or-nothing approach, the Board “may consider whether a lack of particularity as to one or more of the asserted grounds justifies denial of an entire petition.” *Adaptics*, 17. The Petition lacks such particularity here. Some of Petitioner’s challenges involve the combination of four, five, and six references in various combinations, but Petitioner treats them as essentially the same. *E.g.*, Petition, 15 (identifying grounds based on “Thibeault-Cooper840-Monk-Cooper437-Monk802, and Thibeault-Azenkot-Monk-Cooper437-Monk802, in further view of Currivan”). In some Grounds, Petitioner combines its primary reference (Thibeault) in a mishmash of Grounds and arguments, none of which meets the requisite particularity. Petitioner does not sufficiently “specify what Petitioner regards as the difference(s)” among its most heavily relied-on and apparently interchangeable references (Cooper840 and Azenkot) and the challenged claims. *Adaptics*, 20. Petitioner also “fails to explain why it needs to assert so many grounds and references to show unpatentability of such a limited number” of claims. *Adaptics*, 21.

The sheer volume and excessiveness of Petitioner’s grounds are exacerbated by the fact that Petitioner filed *three* simultaneous petitions seeking review of the ’438 Patent citing substantially similar prior art. *See* Paper 3 (Petitioner’s Ranking Paper). Petitioner’s first, highest-ranked petition in IPR2025-00183 adds an

additional **12 grounds**; Petitioner's second, middle-ranked petition in IPR2025-00184 adds an additional **32 grounds**; and that is before even getting to the -00185 Petition which is the lowest ranked and adds a further **24 grounds**, for a total of **68 separate grounds** across all three petitions. And all three petitions rely on the same secondary references (Cooper840, Azenkot, and Currivan, among other overlapping prior art) and similar primary references that rely on the same tired logical channel technology which all fail for the same reasons as caring only about assignment of modems to those logical channels. Meanwhile, Petitioner submitted only the barest of explanations for why all three petitions should be considered. Paper No. 3 at 2-3. Petitioner does not even address why it was necessary for all three Petitions to rely on Cooper840, Azenkot, and Currivan (as well as other overlapping primary, secondary, and even tertiary references). *See id.* While Petitioner might have wanted to avoid 68 grounds in a single Petition, Petitioner's "throw everything against the wall and see what sticks" approach is not appropriate.

Petitioner's "voluminous and excessive" number of grounds, wholly lacking in the requisite particularity, is an independently sufficient reason to deny institution. *Adaptics*, 18.

**C. The Board Has Already Adjudicated the Validity of Similar Claims, Based on Much of the Same Art and Arguments, Giving Petitioner an Unfair “Roadmap” for These Latest Petitions**

As discussed above, the Board previously considered—and rejected—Petitioner’s challenges to the ’682 Patent. *See generally General Plastic Indus. Co. v. Canon Kabushiki Kaisha*, IPR2016-01357, Paper 19 (P.T.A.B. Sept. 6, 2017) (precedential); *see also* Ex. 2019, 2 (relevant factors include “[w]hether the PTAB or another forum has already adjudicated the validity or patentability of the challenged patent claims”). *General Plastic* addresses discretionary denial in the context of a petition against a patent that was previously challenged before the Board. *See id.* at 16. That is essentially the case here. The ’682 Patent claims are similar to those of the ’438 Patent. In fact, the Examiner characterized the ’682 Patent claims as *broader* than the claims of the ’438 Patent (*supra* 8), supporting the idea that the ’438 Patent would have survived the same challenge.

Based on the factors laid out in *General Plastic*, the overlap between the previous two challenges in IPR2024-00444 and -00445 and the current petitions weighs in favor of discretionary denial. Petitioner filed all five IPR petitions. *General Plastic* at 16 (Factor 1). Petitioner knew or should have known of the prior art asserted in the current set of petitions—most of it is the same as the art asserted in the earlier IPRs. *Id.* (Factor 2). Petitioner also filed the current petitions three

months *after* receiving the Board's institution decisions, as well as Patent Owner's preliminary responses, in the earlier IPRs. *Id.* (Factors 3, 4).

And finally, Petitioner offers no explanation for its delay in filing the current set of petitions. *Id.* (Factor 5). Petitioner has been aware of its infringement of the '438 Patent at least since November 3, 2023, when Patent Owner first served an infringement contention claim chart for the patent. Ex. 2011, *Entropic Communications, LLC v. Cox Communications, Inc. et al*, 2:23-cv-01049, Dkt. 143-3, ¶ 465 (C.D. Cal. Dec. 15, 2023) (redacted proposed 3d amended complaint against Comcast). Petitioner filed IPR petitions against the '682 Patent on February 15, 2024. *See Comcast Communications, LLC v. Entropic Communications, LLC*, IPR2024-00444, Paper 2 (P.T.A.B. Feb. 15, 2024); IPR2024-00445, Paper 2 (P.T.A.B. Feb. 15, 2024). But instead of filing IPR petitions against the '438 Patent at around the same time, Petitioner waited another *ten months*, during which time Patent Owner submitted its preliminary response, and the Board issued its decision denying institution on the merits.

Based on the changes made between the earlier IPR petitions and the current IPR petitions, it is evident that Petitioner used the institution decisions and Patent Owner's preliminary responses as a roadmap for this second wave of challenges. This is a practice that the Board heavily disfavors because it gives such an unfair advantage to the Petitioner. *See Masimo Corp. v. Apple Inc.*, IPR2024-00071, Paper



7, 19–21 (P.T.A.B. Apr. 25, 2024) (“The new embodiments relied on and modified arguments addressing claim 1 of the ’257 patent suggest that Petitioner is using the prior proceedings as a roadmap to address issues to its first petition in the 745 IPR. Accordingly, this factor weighs strongly in favor of invoking our discretion to deny institution.”); *see also Aylo FreeSites Ltd. v. Dish Technologies LLC*, IPR2024-00513, Paper 13, 16 (P.T.A.B. Aug. 13, 2024) (“Petitioner had the benefit of Patent Owner’s substantive arguments in closely related proceedings”).

Accordingly, this factor weighs in favor of discretionary denial.

**D. Settled Expectations and Petitioner’s Undue Delay Favor Discretionary Denial**

The March 26, 2025 Memorandum permits the Board to consider the “settled expectations of the parties, such as the length of time the claims have been in force.” Ex. 2019, 2. That factor weighs in favor of discretionary denial too.

The ’438 Patent issued in January of 2018 (Ex. 1201) and relates to technology covered by a family of patents, including the ’682 Patent which has been asserted against Petitioner from day one of the parallel District Court litigation. *See* Ex. 2007, *Entropic Communications, LLC v. Comcast Corp.*, 2:23-cv-01050, Dkt. 1, ¶ 1 (C.D. Cal. Feb. 10, 2023) (complaint for patent infringement). Petitioner has known about the patents asserted in the District Court litigation, including the ’438 Patent, at least since August 9, 2022, when it received a notice letter from Patent Owner. *See id.* at

¶ 26; *see also* Ex. 2011, *Entropic Communications, LLC v. Cox Communications, Inc. et al*, 2:23-cv-01049, Dkt. 143-3, ¶ 26 (proposed 3d amended complaint against Comcast). Petitioner has also been aware of its infringement of the '438 Patent since at least November 3, 2023, when Patent Owner first served an infringement contention claim chart for the patent. *See* Ex. 2011, ¶ 465. However, Petitioner waited for over a year to file these petitions on December 6, 2024.

In addition to pendency of the '438 Patent and Petitioner's long knowledge of the '438 Patent, there was nothing stopping Petitioner from filing its challenges to the '438 Patent 10 months earlier at the same time it filed its challenges to the '682 Patent. *See Comcast Cable Communications, LLC v. Entropic Communications, LLC*, IPR2024-00444, Paper 2 (P.T.A.B. Feb. 15, 2024); IPR2024-00445, Paper 2 (P.T.A.B. Feb. 15, 2024). Petitioner could have easily filed the instant challenges to the '438 Patent around the same time, especially considering the overlap between the claim language, the art, and Petitioner's invalidity arguments. But instead, Petitioner took the opportunity to wait and see how the Board would respond to its earlier petitions and then adjust and supplement its arguments accordingly. This not only gave Petitioner an unfair advantage as referenced above; it could also mean delaying resolution of the parallel District Court case by at least another 10 months.

Recently, the USPTO Acting Director has indicated the Office's preference for earlier patent challenges. *See* Ex. 2005 (Acting USPTO Leader Says New

Policies Will Bolster Patents)<sup>5</sup>. Speaking at the LeadershIP 2025 event organized by the Center for Strategic & International Studies, the Acting Director described it as “unfortunate[]” that “early tools are rarely used because there are other portions of the AIA that encourage competitors to wait until they are actually sued for infringement to participate in this joint exercise to improve the IP system.” *Id.* She further noted that the Office is “considering ways to encourage early challenges provided by the AIA over late ones.” *Id.*

This is a case where an earlier challenge was well within Petitioner's reach, which is proven out by Petitioner's use of its earlier '682 Patent IPR petitions as a template to challenge the '438 Patent now. Because Petitioner waited an additional 10 months to see what Patent Owner and the Board would do with the '682 Patent IPRs, Patent Owner is now prejudiced by having to respond to what is essentially Version 2.0 of Petitioner's earlier invalidity theories. Not to mention, there is still the risk of further delays to the District Court litigation.

Accordingly, this factor also weighs in favor of discretionary denial.

**E. Petitioner's Reliance on Expert Testimony Favors Discretionary Denial**

The March 26, 2025 Memorandum notes that “the extent of the petition's reliance on expert testimony” bears on the Board's discretion to deny institution.

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<sup>5</sup> Available at: <https://www.law360.com/articles/2316863>

Ex. 2019, 2. Just as in the earlier IPRs against the '682 Patent, Petitioner's challenges against the '438 Patent hinge on whether the secondary references (in this case, Cooper840 and Azenkot) teach or suggest "generating ... a composite SNR-related metric based at least in part on a worst-case SNR profile." Petitioner relies heavily on expert testimony to carry its burden in that regard, as is detailed in the forthcoming POPRs in these cases.

Petitioner's heavy reliance on expert gap-filling, *ipse dixit* testimony weighs against institution. For example, with respect to Cooper840, Petitioner relies on expert opinion to argue about what a POSITA *would have understood* from the reference, rather than what the reference actually discloses. *E.g.*, IPR2025-00185, Paper 2, 26-27 ("[a] POSITA would have understood from Cooper840 that setting the modulation profile as a function of the lowest SNR or MER is ideal because such a setting ensures that all of the network elements can pass data on the channel") (citing Ex. 1202, ¶ 107). Not only is this argument entirely expert-dependent, as will be explained in more detail in the forthcoming POPRs, it is factually wrong. Cooper840 does not teach "setting the modulation profile as a function of the lowest SNR or MER" because its system always excludes the lowest-performers from its testing pool from which to determine communication parameters. *E.g.*, Ex. 1230, Cooper840, Table 1 (excluding the lowest two performing network elements from the testing pool). With respect to Azenkot, Petitioner similarly relies on expert

testimony about what a POSITA *would have understood* from Azenkot. IPR2025-00185, Paper 2, 37 (“A POSITA would have understood that there are trade-offs between the robustness of a burst profile and throughput”) (citing Ex. 1202, ¶ 134); *id.* at 38 (“A POSITA would have understood that the least capable CM described in Azenkot corresponds to the CM with the lowest SNR”) (citing Ex. 1202, ¶ 135); *id.* (“A POSITA would have also understood that Azenkot’s disclosure of setting a burst profile based on the least capable CM is also a disclosure of generating a value for lowest SNR for a group of CMs”) (citing Ex. 1202, ¶ 135). And, again, Petitioner’s expert’s testimony is based on a mischaracterization of the reference. Azenkot’s only discussion of using “the ‘least capable modem’ in the group,” (the disclosure on which Petitioner and its expert relies) is in Azenkot’s criticism of the prior art. *See* Ex. 1231, Azenkot, ¶¶ [0001]-[0002].

Thus, the linchpin of these petitions is dependent on gap-filling, *ipse dixit* expert opinion that is factually wrong in any event. Accordingly, this factor weighs in favor of discretionary denial.

**F. The Merits of Petitioner’s Challenge Are Weak and Were Previously Rejected by the Board**

The March 26, 2025 Memorandum explicitly calls out “the strength of the unpatentability challenge” as being relevant to the Board’s discretion. Ex. 2019, 2. As discussed above, the Board has already evaluated the validity of similar claims

in the '682 Patent. These latest IPR petitions rely on largely the same prior art and arguments. The only difference is that Petitioner has replaced the secondary references Saey, Gross, and Cioffi with the next available references Cooper840, Azenkot, and Currivan (two of which were already considered during prosecution). However, as discussed in detail above, these latest petitions are equally dependent on expert testimony to contrive an explanation for how the art allegedly teaches “generating ... a composite SNR-related metric based at least in part on a worst-case SNR profile.” Petitioner and its expert failed to convince the Board the first time around, and Petitioner cannot point to any changes in the law or new judicial precedent that would merit a different outcome. *See* Ex. 2019, 2 (relevant factors include “[w]hether there have been changes in the law or new judicial precedent issued since issuance of the claims that may affect patentability”).

#### **IV. DISCRETIONARY DENIAL IS WARRANTED BASED ON *FINTIV* BECAUSE OF PARALLEL DISTRICT COURT LITIGATION**

The petitions should also be denied based on the Board's precedential decision in *Fintiv* because there are multiple ongoing District Court litigations involving the '438 Patent. As set forth in the March 24, 2025 Guidance and in the March 26, 2025 Memorandum, the Board will consider the *Fintiv* factors in evaluating whether to deny institution based on parallel proceedings. *See Apple Inc. v. Fintiv, Inc.*,

IPR2020-00019, Paper 11 (P.T.A.B. Mar. 20, 2020) (precedential). *Fintiv* lists six non-exhaustive factors:

1. whether the court granted a stay or evidence exists that one may be granted if a proceeding is instituted;
2. proximity of the court's trial date to the Board's projected statutory deadline for a final written decision;
3. investment in the parallel proceeding by the court and the parties;
4. overlap between issues raised in the petition and in the parallel proceeding;
5. whether the petitioner and the defendant in the parallel proceeding are the same party; and
6. other circumstances that impact the Board's exercise of discretion, including the merits.

*Id.* at 6. A “holistic view” (*id.*) of these factors favors discretionary denial.

**A. Parallel District Court Litigation Merits Discretionary Denial**

Patent Owner initially filed suit against Petitioner over two years ago on February 10, 2023, alleging infringement of eight patents. Ex. 2007, *Entropic Communications, LLC v. Comcast Corp. et al*, 2:23-cv-01050, Dkt. 1, ¶ 1 (C.D. Cal.) (complaint for patent infringement). That original complaint did not assert the '438 Patent, but it did assert the closely related '682 Patent. On October 16, 2023, the

*Comcast* case was consolidated with another case involving Cox Communications, where Patent Owner had also asserted the '682 Patent. Ex. 2008, *Entropic Communications, LLC v. Cox Communications, Inc. et al*, 2:23-cv-01049, Dkt. 95 (C.D. Cal.) (order granting stipulation to consolidate cases).

Between November and December of 2023, Patent Owner filed motions for leave to amend/supplement its complaints to add the '438 Patent against both Cox and Comcast. Ex. 2009, Dkt. 114 (Nov. 13, 2023); Ex. 2010, Dkt. 143 (Dec. 15, 2023); *see also* Ex. 2013, Dkt. 277, p. 14 (Mar. 6, 2024) (Special Master report recommending that the Court grant both motions). Patent Owner also served an infringement contention claim chart for the '438 Patent on Petitioner as part of its motion. *See* Ex. 2012, Dkt. 143-24.

Further, the district court cases involving the '438 Patent are not stayed and—because of the actions of the defendants there—are unlikely to be stayed. On February 12, 2025, the Court issued an order *conditionally* staying both cases because *inter partes* review had been instituted against seven of the eight original patents. Ex. 2014, Dkt. 366. These were based on a wave of 15 IPR petitions filed



by Petitioner on February 15–16, 2024. *See id.* at 3.<sup>6</sup> Notably, the '682 Patent was the lone patent for which the Board denied institution on all petitions. *See Comcast Cable Communications, LLC v. Entropic Communications, LLC*, IPR2024-00444, Paper 9 (P.T.A.B. Sept. 6, 2024); IPR2024-00445, Paper 9 (P.T.A.B. Sept. 9, 2024). Also of note, the Court's Order made the stay conditional on Cox agreeing to be bound by the same estoppel provisions applicable to Petitioner under 35 U.S.C. § 315(e)(2). Ex. 2014, *Cox Communications*, 2:23-cv-01049, Dkt. 366, p. 11. As it would turn out, Cox did *not* agree to be estopped. Ex. 2015, Dkt. 367 (Feb. 21, 2025).

Because Cox has not agreed to estoppel, the Court's precondition on the stay order has not been met. Under the plain text of the District Court's order, there is currently no stay in effect in either parallel District Court case.<sup>7</sup> The parties submitted a joint report to the District Court (Ex. 2016, Dkt. 371) on March 7, 2025. In that report, Patent Owner and Cox agreed that the *Cox* case should proceed at least

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<sup>6</sup> The Order incorrectly identifies IPR2024-00578 as being filed by Petitioner against the '682 Patent. In fact, Petitioner filed two petitions against the '682 Patent: IPR2024-00444 and IPR2024-00445.

<sup>7</sup> Comcast disputed this point and submitted its position to the Court in the joint report (Ex. 2016, Dkt. 371) filed on March 7, 2025.

with respect to the '682 and '438 Patents, and both indicated they are amenable to deconsolidating the *Cox* and *Comcast* cases. Ex. 2016, 3, 6–8.

Whether or not the stay is ultimately entered in the *Comcast* case, Patent Owner and Cox have agreed to proceed as to the '682 and '438 Patents, meaning there will be no stay as to those patents, which is highly relevant to *Fintiv* here. Moreover, with respect to the *Comcast* case, all seven instituted IPRs were instituted by October 8, 2024 at the latest.<sup>8</sup> Therefore, final written decisions are expected by October of this year, at which point any stay of the *Comcast* case will be lifted. *See* 35 U.S.C. § 316(a)(11). Each of these facts favor discretionary denial, as do those that follow.

**B. The *Fintiv* Factors Favor Discretionary Denial**

**i. *Fintiv* Factor One Favors Discretionary Denial**

There are not one, but two, parallel District Court proceedings involving the '438 Patent. At least one of those proceedings—the *Cox* case—is unlikely to be

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<sup>8</sup> IPR2024-00442, Paper 8 (Aug. 20, 2024); IPR2024-00430, Paper 8 (Sept. 6, 2024); IPR2024-00441, Paper 8 (Sept. 5, 2024); IPR2024-00446, Paper 11 (Sept. 3, 2024); IPR2024-00432, Paper 13 (Oct. 8, 2024); IPR2024-00435, Paper 13 (Oct. 1, 2024); IPR2024-00438, Paper 14 (Oct. 4, 2024).

stayed at all, especially considering that Cox expressly refused to be bound by any kind of IPR estoppel that might attach to Petitioner if *inter partes* review is instituted.

Even if the *Comcast* case is eventually stayed, the already-instituted IPRs are expected to receive final written decisions by early October 2025. At that point, any stay is likely to be lifted, and the case would be allowed to proceed. The fact remains that the '682 Patent has already survived Petitioner's IPR challenges, meaning the District Court litigation would move forward on that patent regardless. Because of the close similarity between the claims of the '682 Patent and the claims of the '438 Patent, renewing the stay would do little to simplify the issues in the case. *See* Ex. 2014, *Cox Communications*, 2:23-cv-01049, Dkt. 366, pp. 6–7 (the court considering “simplification of the issues” as a factor in whether to grant stay pending IPR).

Accordingly, this factor weighs in favor of discretionary denial.

**ii. *Fintiv* Factors Two and Three Do Not Favor Institution**

*Fintiv* factors two and three are closely related and analyze the expected timing of trial and the extent to which the Court and the parties have already invested in the parallel proceedings. As the Court noted in its conditional stay Order, “the parties and the Court have invested a significant amount of resources in claim construction proceedings,” including a claim construction hearing held in July 2024. Ex. 2014, *Cox Communications*, 2:23-cv-01049, Dkt. 366, p. 5. Petitioner tries to write this off by arguing that the claim construction proceedings did not include

the '438 Patent. *See* Paper 2, 16. However, the Court *did* hear claim construction arguments on the closely related '682 Patent. Based on the similarity between the claims of both patents, as well as the fact that the '682 Patent is a direct continuation of the '438 Patent, it is unlikely that the parties or the Court will need to dedicate meaningful additional resources to construing the claims of the '438 Patent. At the very least, Petitioner has not identified any claim construction issues unique to the '438 Patent that were not already addressed at the July 2024, hearing. In fact, Petitioner cites to the District Court's Claim Construction Order construing "CMTS" in the context of the '682 Patent, implicitly acknowledging that this construction would apply to the '438 Patent as well. Paper 2, 18 (citing Ex. 1234 at 17–21, 25). As such, Petitioner's argument that the '438 Patent was absent from the *Markman* is nothing more than misdirection.

Moreover, the *Cox* and *Comcast* litigations have now both been pending for over two years, which is not an insignificant amount of time. According to data from Lex Machina ([law.lexmachina.com](http://law.lexmachina.com)), Judge Holcomb's median time to trial in civil cases is 721 days, or just under two years. Ex. 2017 (accessed Apr. 27, 2024). With the *Cox* case moving forward on at least the '438 and '682 Patents, and with the Court already having held a claim construction hearing on the relevant claim terms, it is reasonable that the case may be ready for trial by the time final written decisions

are made on these petitions.<sup>9</sup> And once final written decisions are received in the already-instituted IPRs, the *Comcast* case will not be far behind.

Accordingly, these factors do not weigh in favor of institution.

**iii. *Fintiv* Factors Four and Five Favor Discretionary Denial**

*Fintiv* factor five weighs in favor of discretionary denial because Petitioner is a defendant in one of the parallel District Court proceedings. Factor four also weighs in favor of discretionary denial because of the likely overlap between issues raised in the petitions and in the parallel proceedings. As noted above, Cox expressly refused to commit itself to the same IPR estoppel provisions that would attach to Petitioner if the Board decided to institute. Therefore, there is a reasonable likelihood that Patent Owner and Cox will litigate similar issues related to the alleged invalidity of the '438 Patent. Furthermore, Petitioner has not submitted a *Sotera* stipulation in this or the other two petitions challenging the '438 Patent. *See generally Sotera Wireless, Inc. v. Masimo Corp.*, IPR2020-01019, Paper 12 (P.T.A.B. Dec. 1, 2020) (precedential). This weighs heavily against institution

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<sup>9</sup> Patent Owner's Preliminary Response is due April 30, 2025, which means an institution decision would be expected by July 30, 2025. Therefore, a final written decision is estimated around July 30, 2026.

because there is nothing to mitigate the risk of duplicative efforts between the District Court and the Board. *See id.* at 19.

**iv. *Fintiv* Factor Six Favors Discretionary Denial**

The sixth *Fintiv* factor involves consideration of “other circumstances that impact the Board’s exercise of discretion, including the merits.” These factors have been discussed at length throughout, but to briefly summarize:

- The Office has already considered and rejected Petitioner’s similar challenges against the ’682 Patent, and the “new” art that is introduced this time around is not really new—it includes art that the Office already considered during prosecution.
- Petitioner has inundated the Board and Patent Owner with parallel petitions, flying in the face of the Office’s express guidance.
- Despite having early knowledge of its infringement of the ’438 Patent, Petitioner delayed filing these petitions until it had the benefit of seeing the Board’s institution decisions in the earlier challenges to the ’682 Patent in IPR2024-00444 and -00445, giving Petitioner an unfair advantage in these third, fourth, and fifth challenges.
- Petitioner’s invalidity challenges remain weak and once again heavily rely on the gap-filling, *ipse dixit* testimony of its expert.

These factors heavily weigh in favor of discretionary denial, both on their own merit and when considered in the context of *Fintiv*.

## V. CONCLUSION

For the reasons set forth above, Patent Owner respectfully requests the Board exercise its discretion to deny institution.

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**CERTIFICATION OF WORD COUNT UNDER 37 C.F.R. § 42.24(d)**

The undersigned hereby certifies that the foregoing contains 8,976 words according to the word count of the word-processing software used to prepare the foregoing.

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**CERTIFICATE OF SERVICE**

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