

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

AMAZON.COM SERVICES LLC and
AMAZON WEB SERVICES, INC.

Petitioners,

v.

HEADWATER RESEARCH LLC,

Patent Owner

IPR2025-01571
U.S. Patent No. 8,667,571

**PETITIONERS' OPPOSITION TO PATENT OWNER'S REQUEST FOR
DISCRETIONARY DENIAL**

TABLE OF CONTENTS

I.	INTRODUCTION	1
II.	BACKGROUND	3
III.	ARGUMENT	5
A.	The Board’s Extensive Prior Experience With and Determinations Regarding PO’s Patents Strongly Favor Reaching This IPR’s Merits And Negate Any Alleged PO Settled Expectations	5
B.	PO’s Litigation Tactics Created Settled Expectations for Amazon That PO Would Not Assert the ’571 Patent Against Amazon.....	8
C.	The Scale and Complexity of PO’s Multi-Patent/Multi- Defendant Litigation Campaign Underscore This IPR Promotes Efficiency	9
D.	Reaching the Merits of This IPR Resulting in an FWD of Unpatentability Would Promote Efficiency Because PO Would Be Estopped From Obtaining Patentably Indistinct Claims in Dozens of Pending Applications	11
E.	The <i>Fintiv</i> Factors Weigh Heavily Against Denial.....	12
1.	Factor 1: The Likelihood of a Stay Is Neutral	12
2.	Factor 2: The Trial Date Weighs Heavily Against Denial Because Trial Will Occur at Least Five Months After the Expected FWD.....	13
3.	Factor 3: The Investment in the Parallel Litigation Weighs Heavily Against Denial Because the Litigation Is in Its Early Stages	14
4.	Factor 4: The Lack of Overlap Between Issues Raised in the Petition and the Parallel Litigation Weighs Heavily Against Denial.....	15
5.	Factor 5: The Parties to the IPR and the Parallel Litigation Are the Same, But the Board Has Found This Factor Still Weighs Against Denial When the FWD Is Likely to Precede the Trial.....	17
6.	Factor 6: Other Circumstances Weigh Heavily Against Denial Because There Are Compelling Reasons to Consider the Merits of This IPR	17

a)	PO Has No Legitimate “Settled Expectations” in the ’571 Patent	18
b)	The Petition Appropriately Relies on Obviousness Grounds and Expert Testimony	19
IV.	CONCLUSION.....	20

TABLE OF AUTHORITIES

CASES

<i>All. Laundry Sys., LLC v. Payrange LLC</i> , PGR2025-00027, Paper 11 (July 17, 2025).....	14
<i>Am. Airlines, Inc. v. Intellectual Ventures I LLC</i> , IPR2025-00785 et al., Paper 11 (Aug. 29, 2025)	14, 15
<i>Amazon.com, Inc. v. NL Giken Inc.</i> , IPR2025-00250, -407, Paper 14, 2 (May 16, 2025)	13
<i>Apple Inc. v. Vampire Labs, LLC</i> , IPR2025-01215, Paper 1 (June 27, 2025).....	20
<i>Apple Inc. v. Vampire Labs, LLC</i> , IPR2025-01215, Paper 8 (Oct. 17, 2025)	16
<i>Berkshire Hathaway Energy Co. v. Birchtech Corp.</i> , IPR2025-00274, Paper 23 (July 2, 2025)	14
<i>BMW of N. Am., LLC v. Mich. Motor Techs. LLC</i> , IPR2023-01234, Paper 11 (Jan. 26, 2024).....	17
<i>Cambridge Indus. USA, Inc. v. Applied Optoelectronics, Inc.</i> , IPR2025-00434 et al., Paper 11 (June 26, 2025).....	19, 20
<i>ClearCorrect Operating, LLC v. Align Tech., Inc.</i> , IPR2025-00814	8
<i>Google LLC v. Brodti Inc.</i> , IPR2025-00472, Paper 19 (June 25, 2025).....	13
<i>Google LLC v. Withrow Networks Inc.</i> , IPR2025-00775, Paper 10 (Aug. 14, 2025)	13
<i>Harbor Freight Tools USA Inc. v. Champion Power Equip., Inc.</i> , IPR2025-00805, Paper 20 (Sept. 19, 2025).....	15
<i>Headwater Rsch. LLC v. Google LLC</i> , No. 26-1207 (Fed. Cir. Nov. 26, 2025)	5

<i>Home Depot U.S.A., Inc. v. H2 Intellect LLC</i> , IPR2025-00480, Paper 11 (Sept. 4, 2025)	9
<i>In re Gesture Tech. Partners, LLC</i> , 160 F.4th 1317 (Fed. Cir. 2025)	17
<i>Mercedes-Benz Grp. AG v. The Phelan Grp., LLC</i> , IPR2025-00413, Paper 13 (June 25, 2025)	8, 13
<i>Nintendo Co. v. Resonant Sys., Inc.</i> , IPR2025-00680, Paper 18 (Aug. 14, 2025)	8, 14
<i>Orca Security Ltd. v. Wiz, Inc.</i> , IPR2025-01083 et al., Paper 10 (Oct. 17, 2025)	14, 15
<i>POSCO Co. v. ArcelorMittal</i> , IPR2025-00370 et al., Paper 10 (June 25, 2025)	8, 11
<i>RavenWhite Licensing LLC v. The Home Depot, Inc.</i> , No. 2:24-cv-688, Dkt. 96 (E.D. Tex. June 18, 2025)	12
<i>RØDE Microphones, LLC v. Zaxcom, Inc.</i> , IPR2025-00557, Paper 11 (July 17, 2025)	13
<i>Samsung Elecs. Co. v. Headwater Rsch. LLC</i> , IPR2024-00010, Paper 7 (May 23, 2024)	7
<i>Shenzen Tuozhu Tech. Co. v. Stratasys, Inc.</i> , IPR2025-00438 et al., Paper 10 (July 17, 2025)	11
<i>SoftView LLC v. Apple Inc.</i> , 108 F.4th 1366 (Fed. Cir. 2024)	11
<i>Sotera Wireless, Inc. v. Masimo Corp.</i> , IPR2020-01019, Paper 12 (Dec. 1, 2020)	2, 15, 16
<i>Tesla, Inc. v. Intellectual Ventures II LLC</i> , IPR2025-00217 et al., Paper 9 (June 13, 2025) (informative)	11
<i>Twitch Interactive, Inc. v. Razdog Holdings LLC</i> , IPR2025-00307 et al., Paper 18 (May 16, 2025)	13

<i>W. Digit. Techs., Inc. v. Godo Kaisha IP Bridge 1</i> , IPR2025-00701, Paper 9 (Aug. 14, 2025)	13, 14
--	--------

STATUTES

35 U.S.C. §311(b)	16, 20
35 U.S.C. §314(a)	16
35 U.S.C. §315(e)(2)	15, 16

OTHER AUTHORITIES

37 C.F.R. §42.73(d)(3)	11
------------------------------	----

EXHIBIT LIST

No.	Description
Exhibit 1001	U.S. Patent No. 8,667,571 (“’571 Patent”)
Exhibit 1002	File History of U.S. Patent No. 8,667,571 (“’571 Patent FH”)
Exhibit 1003	Declaration of Dr. Charles D. Creusere, Ph. D.
Exhibit 1004	U.S. Patent No. 8,555,273 to Chia et al. (“ <i>Chia</i> ”)
Exhibit 1005	U.S. Patent Application Publication No. US2007/0185975 to Cunningham et al. (“ <i>Cunningham</i> ”)
Exhibit 1006	International Publication No. WO2005/094011 to Clontz et al. (“ <i>Clontz</i> ”)
Exhibit 1007	International Publication No. WO2008/060300 to Han et al. (“ <i>Han</i> ”)
Exhibit 1008	U.S. Patent No. 7,975,147 to Qumei (“ <i>Qumei</i> ”)
Exhibit 1009	Leiner et al. <i>ISOC History of the Internet</i> . 1997. https://www.internetsociety.org/resources/doc/2017/brief-history-internet/ (“ <i>Leiner</i> ”)
Exhibit 1010	U.S. Patent Application Publication No. US2008/0316963 to Huang et al. (“ <i>Huang</i> ”)
Exhibit 1011	U.S. Patent Application Publication No. US2006/0143701 to Dos Santos et al. (“ <i>Dos Santos</i> ”)
Exhibit 1012	U.S. Patent Application Publication No. US2003/0120822 to Langrind et al. (“ <i>Langrind</i> ”)
Exhibit 1013	Lehman et al. “Control Plane Architecture and Design Considerations for Multi-Service, Multi-Layer, Multi-Domain Hybrid Networks.” May 2007. (“ <i>Lehman</i> ”)
Exhibit 1014	Harold, Elliotte Rusty. <i>Java Network Programming</i> . Third Edition. October 2004. (“ <i>Harold</i> ”)
Exhibit 1015	U.S. Patent No. 7,627,532 to Randle et al. (“ <i>Randle</i> ”)
Exhibit 1016	U.S. Patent No. 8,429,081 to Dronamraju et al. (“ <i>Dronamraju</i> ”)
Exhibit 1017	U.S. Patent Application Publication No. US2008/0008116 to Buga et al. (“ <i>Buga</i> ”)

No.	Description
Exhibit 1018	3GPP TS 23.140. Version 6.9.0. March 2005. https://www.etsi.org/deliver/etsi_ts/123100_123199/123140/06.09.00_60/ts_123140v060900p.pdf (“ <i>TS-23.140</i> ”)
Exhibit 1019	U.S. Patent No. 5,625,877 to Dunn et al. (“ <i>Dunn</i> ”)
Exhibit 1020	U.S. Patent Application Publication No. US2008/0194233 to Henry (“ <i>Henry</i> ”)
Exhibit 1021	Singhal et al. <i>NIST Guide to Secure Web Services</i> . August 2007. https://nvlpubs.nist.gov/nistpubs/legacy/sp/nistspecialpublication800-95.pdf (“ <i>NIST</i> ”)
Exhibit 1022	Chimeh et al. “Traffic Capacity of UMTS System in Reverse Link.” <i>Wireless Personal Communications</i> . 51(2):303-316. October 2008. (“ <i>Traffic</i> ”)
Exhibit 1023	Holly Lynne McKinley. <i>SSL and TLS: A Beginners’ Guide</i> . 2003. https://www.giac.org/paper/gsec/2766/ssl-tls-beginnersguide/104699 (“ <i>SSL and TLS</i> ”)
Exhibit 1024	Robert Richards. <i>Pro PHP XML and Web Services</i> . 2006. (“ <i>Pro PHP</i> ”)
Exhibit 1025	U.S. Patent Application Publication No. US2007/0165622 to O’Rourke et al. (“ <i>O’Rourke</i> ”)
Exhibit 1026	U.S. Patent Application Publication No. US2007/0033273 to White et al. (“ <i>White</i> ”)
Exhibit 1027	U.S Patent Application Publication No. US2008/0072035 to Johnson et al. (“ <i>Johnson</i> ”)
Exhibit 1028	U.S. Patent Application Publication No. US2006/0098678 to Tan (“ <i>Tan</i> ”)
Exhibit 1029	U.S. Patent No. 7,120,429 to Minear et al. (“ <i>Minear</i> ”)
Exhibit 1030	Frei et al. “Large-Scale Vulnerability Analysis.” September 2006. (“ <i>Frei</i> ”)
Exhibit 1031	U.S. Patent Application Publication No. US2008/0288599 to Kutchmark et al. (“ <i>Kutchmark</i> ”)
Exhibit 1032	RFC 2068 Specification. January 1997. https://www.rfc-editor.org/rfc/pdf/rfc2068.txt.pdf (“ <i>RFC</i> ”)
Exhibit 1033	International Publication No. WO2007/059628 to Grigoriev et al. (“ <i>Grigoriev</i> ”)
Exhibit 1034	Rob Mattison. <i>The Telco Revenue Assurance Handbook</i> . 2005. (“ <i>Telco</i> ”)

No.	Description
Exhibit 1035	U.S. Patent Application Publication No. US2001/0027449 to Wright (“ <i>Wright</i> ”)
Exhibit 1036	Bawa et al. “The Effects of Free Sample Promotions on Incremental Brand Sales.” <i>Marketing Science</i> . 23(3):345-363. August 2004. (“ <i>Free Samples</i> ”)
Exhibit 1037	U.S. Patent No. 6,763,479 to Herbet (“ <i>Herbet</i> ”)
Exhibit 1038	U.S. Patent No. 6,651,117 to Wilson et al. (“ <i>Wilson</i> ”)
Exhibit 1039	U.S. Patent Application Publication No. US2010/0088235 to Chatfield et al. (“ <i>Chatfield</i> ”)
Exhibit 1040	Downing et al. <i>Barron’s Dictionary of Computer and Internet Terms</i> . Tenth Edition. 2009. (“ <i>Barron’s</i> ”)
Exhibit 1041	Gateway. <i>PC Basics – Get a Great Start</i> . 2002. (“ <i>Gateway</i> ”)
Exhibit 1042	U.S. Patent Application Publication No. US2005/0198257 to Gupta et al. (“ <i>Gupta</i> ”)
Exhibit 1043	U.S. Patent No. 8,037,295 to Lin (“ <i>Lin</i> ”)
Exhibit 1044	U.S. Patent Application Publication No. US2006/0274743 to Yegin et al. (“ <i>Yegin</i> ”)
Exhibit 1045	U.S. Patent No. 7,702,107 to Messing (“ <i>Messing</i> ”)
Exhibit 1046	Mackie-Mason et al. “Some Economics of the Internet.” February 1994. https://people.ischool.berkeley.edu/~hal/Papers/UM/Economics_of_Internet.pdf (“ <i>MacKie-Mason</i> ”)
Exhibit 1047	Microsoft Server 2003 Datasheet. 2003. https://download.microsoft.com/download/a/1/4/a143262c-4912460c-9c88-d797c749a05f/WS03_Partner_Salessheet.pdf
Exhibit 1048	Microsoft Server 2008 Datasheet. https://my.avnet.com/wcm/connect/e42e7469-1994-4d2c-b28d-146afa772feb/WS08_Datasheet.pdf?MOD=AJPERES&CVID=oSI3y8n
Exhibit 1049	Sudhansu Pati. “EJB Development Using Borland JBuilder 8 and BEA WebLogic Server 7.0.” December 2002. (“ <i>Borland</i> ”) https://web.archive.org/web/20070226071411/http://dn.codegear.com/article/images/29528/ejbdevjbweblogic.pdf

No.	Description
Exhibit 1050	Order Granting Joint Motion to Dismiss
Exhibit 1051	Stipulation Letter
Exhibit 1052	<i>Headwater Rsch. LLC v. Apple Inc.</i> , No. 7:25-cv-00318, Dkt. 1 (W.D. Tex. July 17, 2025) (complaint)
Exhibit 1053	<i>Headwater Rsch. LLC v. Apple Inc.</i> , No. 7:25-cv-00318, Dkt. 28 (W.D. Tex. Oct. 31, 2025) (order granting joint motion to dismiss)
Exhibit 1054	<i>Headwater Rsch. LLC v. Amazon.com Services LLC</i> , No. 2:25-cv-00897, Dkt. 1 (E.D. Tex. Aug. 27, 2025)
Exhibit 1055	<i>Headwater Rsch. LLC v. Walmart Inc.</i> , No. 2:25-cv-00961, Dkt. 8 (E.D. Tex. Oct. 23, 2025) (Consolidation Order)
Exhibit 1056	<i>Headwater Rsch. LLC v. Walmart Inc.</i> , No. 2:25-cv-00961, Dkt. 86 (Dec. 23, 2025) (Amazon’s Motion to Stay)
Exhibit 1057	<i>Headwater Rsch. LLC v. Walmart Inc.</i> , No. 2:25-cv-00961, Dkt. 91 (Jan. 6, 2026) (Second Amended Docket Control Order)
Exhibit 1058	PTAB Institutions Search: “Headwater”
Exhibit 1059	<i>Google LLC v. Headwater Rsch. LLC</i> , IPR2024-00942, IPR2024-00943, Paper 20 (Oct. 1, 2025) (FWD)
Exhibit 1060	<i>Cellco P’ship d/b/a Verizon Wireless v. Headwater Partners I LLC</i> , IPR2024-00809, Paper 21 (Oct. 14, 2025) (FWD)
Exhibit 1061	<i>Samsung Elecs. Co. v. Headwater Rsch. LLC</i> , IPR2024-00341, Paper 28 (July 23, 2025) (FWD)
Exhibit 1062	<i>Samsung Elecs. Co. v. Headwater Rsch. LLC</i> , IPR2024-00341, Paper 32 (Sept. 19, 2025) (Denying Director Review)
Exhibit 1063	<i>Samsung Elecs. Co. v. Headwater Rsch. LLC</i> , IPR2024-00341, Paper 33 (Nov. 20, 2025) (Notice of Appeal)
Exhibit 1064	US 8,589,541
Exhibit 1065	US 9,198,042
Exhibit 1066	US 8,406,733
Exhibit 1067	Redline Comparison of Patent Center Text Specification of U.S. Pat No. 8,406,733 and Patent Center Text Specification of U.S. Pat. No. 8,667,571

No.	Description
Exhibit 1068	Headwater litigations
Exhibit 1069	IPRs Regarding Patents in Active Litigation
Exhibit 1070	Continuity data for '571 patent parent application_USPTO
Exhibit 1071	<i>Headwater Rsch. LLC v. Walmart Inc.</i> , No. 2-25-cv-00961, Dkt. 62 (E.D. Tex. Dec. 5, 2025)
Exhibit 1072	<i>Headwater Rsch. LLC v. Walmart Inc.</i> , No. 2-25-cv-00961, Dkt. 67 (E.D. Tex. Dec. 10, 2025)
Exhibit 1073	Federal Court Management Statistics
Exhibit 1074	Email to Counsel Dated December 2, 2025
Exhibit 1075	<i>Headwater Rsch. LLC v. Amazon.com Services LLC</i> , No. 7:25-cv-00286, Dkt. 1 (W.D. Tex. June 20, 2025)
Exhibit 1076	USPTO Assignment Records
Exhibit 1077	US 8,340,634

I. INTRODUCTION

The Board should reach the merits of this IPR challenging U.S. Patent No. 8,667,571 (“’571 patent,” Ex-1001). Discretionary denial is inappropriate here because there are compelling reasons to address unpatentability and Headwater Research LLC (“PO” or “Headwater”) has no legitimate “settled expectations” in the ’571 patent.

First, the Board’s prior experience with and determinations regarding Headwater patents strongly favor reaching the merits of this IPR. Before PO sued Amazon in August 2025, the Board instituted at least twenty petitions challenging Headwater patents (and considered many others). Further, around the time that suit was filed, the Board issued final written decisions (“FWDs”) for three patents related to the ’571 patent, finding all challenged claims unpatentable. Notably, one (for US 8,406,733 (“’733 patent”)) addressed materially similar claims; the ’733 claims relate to an end-user device receiving encrypted control-plane communications, whereas the ’571 claims relate to a network sending such communications to an end-user device. Given this history, reaching this IPR’s merits is an efficient use of Office resources.

Second, PO’s own litigation conduct shows Amazon’s settled expectations outweigh any that PO alleges based on patent age alone. Specifically, PO filed over twenty suits against other, unrelated companies, before dusting off a never-before-

asserted, decade-old patent from its portfolio of hundreds to assert against Amazon.

Third, the scale and complexity of PO's multi-patent/multi-defendant litigation campaign underscore that this IPR promotes efficiency. PO has asserted twenty-nine patents in over thirty active cases in two different districts with pending motions to transfer to others. Over ten IPRs are pending challenging ten of these patents—including this IPR and two others Amazon filed. The complex, diverse litigation here strongly supports reaching this IPR's merits.

Fourth, if the Board determines that the challenged claims are unpatentable in this IPR, PO will be estopped from obtaining patentably indistinct claims. PO has pursued hundreds of continuing patent applications claiming priority to the '571 parent (US App. 12/380,780 ("780 application")), with over thirty still pending. Reaching the merits of this IPR has the potential to reduce the workload of the Office as well as subsequent litigants.

Finally, the *Fintiv* factors overwhelmingly weigh against discretionary denial. Amazon diligently filed this petition less than two months after being sued on the '571 patent; the parallel litigation is in its early stages; and the district court trial is expected well after the FWD in this IPR. Even so, Amazon filed a *Sotera* stipulation to eliminate any theoretical risk of duplicative efforts.

The Director should decline to discretionarily deny institution and should instead review the merits of this IPR.

II. BACKGROUND

PO or its affiliate is the assignee of hundreds of issued U.S. patents (Ex-1076), many of which appear to claim priority to the parent of the '571 patent (i.e., '780 application) (Ex-1070). Patents claiming priority to the '571 parent began issuing in 2012 (Ex-1077), with the '571 patent issuing in 2014 (Ex-1001). Yet, PO waited nearly a decade to begin asserting its patents in litigation in October 2022, and for the first two and half years, PO or its affiliate filed over twenty suits against Samsung or cell phone carriers in E.D. Tex.¹ Ex-1068. Notably, PO's litigation campaign has consisted of serial attacks against accused infringers, including six E.D. Tex. suits against Samsung from October 2022 to August 2024. *Id.*

None of PO's early cases, however, asserted the '571 patent or involved Amazon or Apple. *Id.* Instead, the first time PO asserted any of its patents against Amazon was in June 2025, when it sued Amazon on two other patents in W.D. Tex. *Id.*; Ex-1075. PO first asserted the '571 patent in July 2025 against Apple in W.D. Tex. Ex-1052.² Despite having already sued Amazon in W.D. Tex., PO inexplicably

¹ PO also filed a single suit against Motorola Mobility and Lenovo in N.D. Cal. (again not asserting the '571 patent) (Ex-1068), which was stayed pending IPR institution decisions and then dismissed with prejudice pursuant to a joint stipulation.

² Apple was a co-Petitioner in this IPR (Paper 1), but it moved to be dismissed from

sued Amazon in E.D. Tex. a month later, asserting the '571 patent and alleging infringement by many of the same products.³ Ex-1054. Complicating the litigation further, the Court has consolidated the Amazon E.D. Tex. case for all pretrial issues with cases against Uber, Target, and Walmart. Ex-1055. None of those cases include the '571 patent, although they do include the patents asserted against Amazon in W.D. Tex. Amazon has filed a motion to stay the E.D. Tex. litigation, and that motion remains pending. Ex-1056.

PO and Amazon agree that the Amazon E.D. Tex. litigation is still in the early stages. Paper 9 ("DD Request"), 6. No depositions have been taken. Plaintiff served infringement contentions in November 2025, and Amazon's invalidity contentions are not due until February 2026. Ex-1057. The claim construction hearing is scheduled in March 2027, deadlines for close of fact discovery/opening expert

this IPR pursuant to settlement (Paper 5). That motion was granted on Jan. 13, 2026. Paper 10. That case is now dismissed. Ex-1053.

³ Both cases involving the '571 patent included a non-overlapping patent (US 9,198,117 against Amazon but not Apple, and US 10,064,055 against Apple but not Amazon). The '055 patent issued in 2018 but had never previously been asserted. Apple challenged that patent in IPR2025-01572 less than three months after being sued on it, but that IPR was dismissed prior to institution pursuant to settlement.

reports are in May 2027, and jury selection is scheduled to begin on Sept. 27, 2027.

Id.

III. ARGUMENT

A. The Board's Extensive Prior Experience With and Determinations Regarding PO's Patents Strongly Favor Reaching This IPR's Merits And Negate Any Alleged PO Settled Expectations

As discussed below, the Board's prior experience with and determinations regarding PO's related patents strongly favor reaching this IPR's merits.

Before PO sued Amazon on the '571 patent in August 2025, the Board had instituted at least twenty petitions challenging a Headwater patent (and considered many others). Ex-1058. The Board issued its FWD in the related '733 IPR in July 2025, determining that all challenged claims were unpatentable. Ex-1061. The Office denied PO's request for Director Review in September 2025. Ex-1062.⁴ In October 2025, the Board issued two additional FWDs determining all challenged claims of two patents related to the '571 patent were unpatentable.⁵ Ex-1059 (US 8,589,541 ("541 patent")); Ex-1060 (US 9,198,042 ("042 patent")). PO neither

⁴ PO appealed the FWD in the '733 patent IPR. Ex-1063; *Headwater Rsch. LLC v. Google LLC*, No. 26-1207 (Fed. Cir. Nov. 26, 2025).

⁵ The '541, '042, and '733 patents are related to the '571 patent at least because they each claim priority to the '780 application. Ex-1001, Cover; Exs. 1064-1066, Cover.

requested Director Review nor appealed the FWDs in the '541 and '042 patent IPRs.

The '733 FWD is particularly relevant. The '733 and '571 patents share a voluminous and almost verbatim specification containing 106 sheets of figures and 163 text columns. Ex-1067 (redline comparison). Further, the '733 and '571 patent claims relate to materially similar subject matter. For example, independent claim 1 of the '733 patent is directed to an end-user device that receives encrypted control-plane messages with an identifier for a device agent, uses a shared key to decrypt the messages, identifies the target agent from an identifier, and delivers the content to the device agent over an internal bus. Ex-1066, claim 1; *id.*, claim 30 (directed to a method in which the end user device performs these steps). Meanwhile, '571 independent claim 1 is directed to a network sending encrypted control-plane communications to an end-user device. Ex-1001, claim 1. The network system receives a message from a server, generates an encrypted message containing the message payload and an agent identifier, and transmits that message to an end-user device. *See also id.*, claim 26 (directed to a network system with means for performing these steps).⁶

⁶ These '571 patent claims also recite limitations relating to a second service control link to a second end-user device. The Petition demonstrates these limitations were obvious, and further, that claims 1 and 26 as a whole were obvious. Paper 1, 20-23,

Given the Board’s institution of the ’733 patent IPR and July 2025 FWD determining the challenged claims were unpatentable, PO had no settled expectations in the ’571 patent when it sued Amazon in August 2025. Indeed, it would be unreasonable for PO to expect the validity of the ’571 claims (related to a network sending encrypted control-plane communications to end-user devices) would not be challenged when the ’733 claims (related to an end-user device receiving encrypted control-plane communications) were already held unpatentable. Moreover, the Board’s numerous other decisions instituting petitions challenging PO’s patents—and two FWDs issuing shortly after PO sued Amazon and determining the challenged claims of the related ’541 and ’042 patents were unpatentable—further demonstrate that PO did not have settled expectations as to

62 ([1(b)]/[26(b)], [1(b)(i)]/[26(b)(i)], [1(b)(ii)]/[26(b)(ii)], [1(b)(iii)]/[26(b)(iii)], and [1(b)(iv)]/[26(b)(iv)]), 7-34 (claim 1), 58-69 (claim 26). Moreover, the Board determined another petitioner demonstrated at institution that a similar limitation regarding secure message links with a “plurality of wireless end-user devices” was known in the prior art. *Samsung Elecs. Co. v. Headwater Rsch. LLC*, IPR2024-00010, Paper 7, 12-16 (May 23, 2024). The parties settled late in that IPR (after oral hearing). Amazon has filed IPR2026-00088 challenging all claims of the patent challenged in IPR2024-00010.

the '571 patent.

In sum, the Board's prior experience with and determinations regarding PO's related patents demonstrate both that (1) PO lacks any legitimate settled expectations in the '571 patent; and (2) reaching the merits of this IPR is an appropriate use of Office resources. *See, e.g., Nintendo Co. v. Resonant Sys., Inc.*, IPR2025-00680, Paper 18, 3 (Aug. 14, 2025) (referring petition challenging patent granted in 2014 where Board had determined claims of a continuation patent with "substantially similar" claims were unpatentable); *Mercedes-Benz Grp. AG v. The Phelan Grp., LLC*, IPR2025-00413, Paper 13, 2 (June 25, 2025) (referring petition challenging patent granted in 2015 where "claims of a related patent were recently found unpatentable"); *POSCO Co. v. ArcelorMittal*, IPR2025-00370 et al., Paper 10, 2-3 (June 25, 2025) (referring petitions where, before issuance of challenged claims, the Board issued FWD finding related claims unpatentable); *cf. ClearCorrect Operating, LLC v. Align Tech., Inc.*, IPR2025-00814 et al., Paper 14, 3 (Aug. 29, 2025) (referring petitions where petitioner demonstrated Office erred by allowing claims after Board determined "substantially similar claims" were unpatentable).

B. PO's Litigation Tactics Created Settled Expectations for Amazon That PO Would Not Assert the '571 Patent Against Amazon

PO's litigation history further shows Amazon's settled expectations should outweigh any that PO alleges based solely on patent age. As discussed in §II, PO has a history of complicated, multi-patent litigation, often serially filing multiple suits

against the same defendant. Headwater waited until eleven years after the '571 patent issued (in 2014) to ever assert it (for the first time in 2025). Further, Headwater sued cell phone manufacturers (Samsung) and wireless carriers for the first almost three years (and over twenty suits) of its litigation campaign. Amazon is neither of those and could not have reasonably expected that Headwater would turn to Amazon as a litigation target, or that Headwater would pluck a never-before-asserted, 11-year-old patent from Headwater's portfolio of hundreds to assert against Amazon. *See Home Depot U.S.A., Inc. v. H2 Intellect LLC*, IPR2025-00480, Paper 11, 2-3 (Sept. 4, 2025) (informative).

C. The Scale and Complexity of PO's Multi-Patent/Multi-Defendant Litigation Campaign Underscore This IPR Promotes Efficiency

The scale and complexity of PO's co-pending litigations also favor considering this IPR's merits. As of January 18, 2026, Docket Navigator identifies over thirty active cases (in either W.D. or E.D. Tex., with some having pending motions to transfer to other districts) in which PO asserts a total of twenty-nine patents across the cases, including the '571 patent asserted against Amazon. Ex-1068. And as of that same date (as shown below), Docket Navigator identifies pending IPRs challenging ten of these patents.⁷ Ex-1069. Amazon filed two of these

⁷ In addition to the patents listed in the table, the remaining patents asserted in litigation are (*see* Ex-1068): 9,198,117; 8,023,425; 8,799,451; 10,791,471;

co-pending IPRs: IPR2026-00088 (9,615,192), -00106 (10,321,320).

No.	Patent	IPRs
1.	'571 patent	IPR2025-01571
2.	US 9,615,192	IPR2026-00088; IPR2026-00154 (copycat IPR)
3.	US 10,321,320	IPR2026-00106; IPR2026-00153 (copycat IPR)
4.	US 9,179,359	IPR2026-00049
5.	US 9,609,544	IPR2026-00138
6.	US 8,631,102	IPR2026-00050
7.	US 10,237,757	IPR2026-00048
8.	US 9,647,918	IPR2026-00137
9.	US 9,094,868	IPR2024-01468; IPR2025-00426 (copycat IPR; Petitioner has moved to terminate)
10.	US 9,413,502	IPR2025-00404

Given the Board's prior experience and technical expertise, the Board is positioned to address the unpatentability of PO's vast number of challenged patents

8,635,335; 8,666,364; 9,143,976; 9,277,445; 11,096,055; 11,405,429; 11,966,464; 11,985,155; 8,639,935; 9,609,510; 9,973,930; 8,589,541; 8,924,543; 9,198,042; and 9,215,613.

much more efficiently and consistently than multiple district courts. This strongly favors reaching this IPR's merits. *See, e.g., Tesla, Inc. v. Intellectual Ventures II LLC*, IPR2025-00217 et al., Paper 9, 2-3 (June 13, 2025) (informative) (noting "[t]he large number and vast scope of the patents asserted in the district court litigation...weighs against discretionary denial"); *see also, e.g., Shenzhen Tuozhu Tech. Co. v. Stratatsys, Inc.*, IPR2025-00438 et al., Paper 10, 3 (July 17, 2025) (same).

D. Reaching the Merits of This IPR Resulting in an FWD of Unpatentability Would Promote Efficiency Because PO Would Be Estopped From Obtaining Patentably Indistinct Claims in Dozens of Pending Applications

PO has filed a massive number of applications claiming priority to the parent '780 application. Patent Center lists ~600 such applications, and from 2020-2025 alone, PO filed over 100 such applications, with over 30 still pending. Ex-1070. If the challenged claims are held unpatentable in this IPR, PO would be estopped from obtaining patentably indistinct claims in these applications, thus promoting efficiency by avoiding the need to relitigate the invalidity of those claims (either before the Office or elsewhere). 37 C.F.R. §42.73(d)(3)(i); *SoftView LLC v. Apple Inc.*, 108 F.4th 1366 (Fed. Cir. 2024); *POSCO Co.*, IPR2025-00370 et al., Paper 10, 2-3 ("It is an appropriate use of Office resources to provide consistency and predictability to the public, and to ensure that a patent applicant or owner does not take action inconsistent with the judgment in a prior Office proceeding. *See* 37

C.F.R. §42.73(d)(3) (addressing patent owner estoppel).”).

E. The *Fintiv* Factors Weigh Heavily Against Denial

As discussed above, there are several compelling reasons to reach the merits of this IPR. In addition, the balance of the *Fintiv* factors overwhelmingly weighs against discretionary denial. Every factor either weighs against denial (factors 2-6) or is neutral (factor 1).

1. Factor 1: The Likelihood of a Stay Is Neutral

This factor is neutral, and PO agrees.⁸ DD Request, 5. Amazon filed a motion to stay the parallel litigation on December 23, 2025, which remains pending.⁹ Ex-1056.

⁸ Notably, the district court may weigh the relative timing of trial and the expected FWD as supporting a stay. *RavenWhite Licensing LLC v. The Home Depot, Inc.*, No. 2:24-cv-688, Dkt. 96, 3 (E.D. Tex. June 18, 2025) (determining that prejudice factor weighs “slightly in favor of a stay” where IPRs were instituted and FWDs were “expected before the scheduled trial”).

⁹ PO contends that Amazon has not requested a stay (*id.*), but Amazon filed a motion to stay the same day PO filed its discretionary denial brief. Ex-1056.

2. Factor 2: The Trial Date Weighs Heavily Against Denial Because Trial Will Occur at Least Five Months After the Expected FWD

PO effectively concedes this factor does not favor denial. DD Request, 6.¹⁰ This is not surprising, as trial is scheduled to commence on September 27, 2027, which is *five months after the expected FWD* on April 22, 2027. Moreover, the scheduled trial date is consistent with recent statistics. Ex-1073, 35.

Accordingly, because trial is expected well after the FWD, this factor weighs heavily against discretionary denial. *See, e.g., Amazon.com, Inc. v. NL Giken Inc.*, IPR2025-00250, -407, Paper 14, 2 (May 16, 2025) (declining to discretionarily deny petitions where FWD would issue before anticipated trial); *Twitch Interactive, Inc. v. Razdog Holdings LLC*, IPR2025-00307 et al., Paper 18, 2 (May 16, 2025) (same); *Mercedes-Benz Grp. AG*, IPR2025-00413, Paper 2, 2 (same); *Google LLC v. Brodti Inc.*, IPR2025-00472, Paper 19, 2 (June 25, 2025) (same); *RØDE Microphones, LLC v. Zaxcom, Inc.*, IPR2025-00557, Paper 11, 2 (July 17, 2025) (same); *Google LLC v. Withrow Networks Inc.*, IPR2025-00775, Paper 10, 2 (Aug. 14, 2025) (same); *W. Digit. Techs., Inc. v. Godo Kaisha IP Bridge 1*, IPR2025-00701, Paper 9, 2 (Aug.

¹⁰ PO incorrectly states that “a trial date has not yet been set.” DD Request, 6. The Court set trial (well after the expected FWD here) in an order that issued more than two weeks before PO filed its brief. Ex-1071; Ex-1072.

14, 2025) (same); *Am. Airlines, Inc. v. Intellectual Ventures I LLC*, IPR2025-00785 et al., Paper 11, 3 (Aug. 29, 2025) (same); *Orca Security Ltd. v. Wiz, Inc.*, IPR2025-01083 et al., Paper 10, 2 (Oct. 17, 2025) (same).

3. Factor 3: The Investment in the Parallel Litigation Weighs Heavily Against Denial Because the Litigation Is in Its Early Stages

Once again, PO effectively concedes this factor does not favor denial. DD Request, 6 (“the case is still in its relatively early stages”). In large part due to Amazon’s diligence in filing the Petition, the parties’ investment in the parallel litigation is minimal: no depositions have been taken, and the deadlines for close of fact discovery and opening expert reports are in May 2027 (after the expected FWD).

Accordingly, because the case is in its early stages, this factor weighs heavily against denial. *See, e.g., Berkshire Hathaway Energy Co. v. Birchtech Corp.*, IPR2025-00274, Paper 23, 2-3 (July 2, 2025) (referring petitions and crediting both petitioners’ diligence and fact that “the parties have made relatively little investment into the multi-district litigation”) (internal citations omitted); *All. Laundry Sys., LLC v. Payrange LLC*, PGR2025-00027, Paper 11, 2 (July 17, 2025) (referring petitions and noting “there has been relatively little investment”); *Nintendo Co.*, IPR2025-00680, Paper 18, 2 (finding fact that “there has not been significant investment by the parties in the parallel proceeding” as “counsel[ing] against discretionary denial”); *W. Digit. Techs.*, IPR2025-00701, Paper 9, 2 (referring petition and noting

“there has not been significant investment by the parties in the parallel proceeding”); *Am. Airlines, Inc.*, IPR2025-00785 et al., Paper 12, 3 (referring petitions and noting “Petitioner provides evidence that there has been little investment”); *Harbor Freight Tools USA Inc. v. Champion Power Equip., Inc.*, IPR2025-00805, Paper 20, 2 (Sept. 19, 2025) (referring petition and noting “no trial date has been set in any of the parallel proceedings, and the parties have made relatively little investment into the multi-district litigation”); *Orca Sec. Ltd.*, IPR2025-01083 et al., Paper 10, 2 (referring petitions and noting “there has been minimal investment”).

4. Factor 4: The Lack of Overlap Between Issues Raised in the Petition and the Parallel Litigation Weighs Heavily Against Denial

Lack of overlap between proceedings weighs heavily against discretionary denial. Indeed, there will be no overlap of issues because trial is scheduled to occur at least five months after the FWD. In these circumstances, Amazon will be estopped under 35 U.S.C. §315(e)(2) from pursuing in the district court grounds it raised or reasonably could have raised in this IPR, effectively eliminating any duplicative work in the parallel litigation even without a stipulation. Regardless, to eliminate any possible overlap, Amazon has also submitted a *Sotera* stipulation, agreeing to be “bound by the full scope of estoppel under 35 U.S.C. §315(e)(2).” Ex-1051.

In support of its argument that this factor favors denial, PO incorrectly contends that Amazon “declined” to file a stipulation, and even if Amazon had filed

a stipulation, the Board has held a *Sotera* stipulation is “insufficient.” DD Request, 6-7 (citing *Motorola v. Stellar*, IPR2024-01205, Paper 19, 3-4 (Mar. 28, 2025)).

PO misstates the facts. Amazon filed a *Sotera* stipulation on December 2, 2025, which was approximately three weeks before PO filed its discretionary denial brief. *See* Ex-1051.¹¹ Further, PO’s assertion that a *Sotera* stipulation is “insufficient” is meritless. Amazon’s stipulation covers the full breadth of the estoppel Congress prescribed, and thus “mitigates any concerns of duplicative efforts between the district court and the Board, as well as concerns of potentially conflicting decisions” such that factor 4 “weighs strongly in favor of not exercising discretion to deny institution under 35 U.S.C. §314(a).” *Sotera Wireless, Inc. v. Masimo Corp.*, IPR2020-01019, Paper 12, 19 (Dec. 1, 2020) (precedential as to §II.A); *see also, e.g., Apple Inc. v. Vampire Labs, LLC*, IPR2025-01215, Paper 8, 8-9 (Oct. 17, 2025) (opposition brief referencing petitioner’s *Sotera* stipulation); *id.*, Paper 10, 2 (Dec. 1, 2025) (Director granting institution).¹²

Finally, PO makes a hypothetical argument suggesting that Amazon may also

¹¹ Amazon served attorneys who have appeared as PO’s counsel (i.e., Reza Mirzaie, Marc Fenster, and Dale Chang). Ex-1074.

¹² There is no basis in the governing statute for requiring a stipulation broader than *Sotera* for institution. *See* 35 U.S.C. §§311(b) and 315(e)(2).

file an *ex parte* reexamination (“EPR”). DD Request, 6-7 (citing *In re Gesture Tech. Partners, LLC*, 160 F.4th 1317, 1321 (Fed. Cir. 2025)¹³ and describing the case as “upholding USPTO’s decision to terminate a reexamination requested by a petitioner...”). Contrary to PO’s suggestion, the Director has never required a stipulation agreeing to forgo EPR for an IPR to be instituted. In any event, Amazon stipulates it will not file an EPR while this IPR is pending.

5. Factor 5: The Parties to the IPR and the Parallel Litigation Are the Same, But the Board Has Found This Factor Still Weighs Against Denial When the FWD Is Likely to Precede the Trial

PO contends this factor (same parties) favors denial (DD Request, 8), but the Board has held otherwise in these circumstances. Specifically, when the FWD “is likely to issue before the district court trial,” the Board has “weigh[ed] this factor against exercising discretion.” *BMW of N. Am., LLC v. Mich. Motor Techs. LLC*, IPR2023-01234, Paper 11, 14-15 (Jan. 26, 2024) (collecting cases).

6. Factor 6: Other Circumstances Weigh Heavily Against Denial Because There Are Compelling Reasons to Consider the Merits of This IPR

For the reasons explained in §§III.A-III.E.5, there are compelling reasons for the Office to reach this IPR’s merits, and this factor weighs heavily against denial.

¹³ PO mischaracterizes *Gesture Tech.*, which upheld the Office’s decision not to terminate an ongoing *ex parte* reexamination. *Gesture Tech.*, 160 F.4th at 1321.

As discussed below, PO's arguments to the contrary are meritless.¹⁴

a) PO Has No Legitimate "Settled Expectations" in the '571 Patent

PO argues the patent's age and licensing support its settled expectations. DD Request, 2-3, 8-9. But as discussed in §§III.A-III.B, PO has no legitimate settled expectations in the '571 patent, and in fact, Amazon had settled expectations resulting from PO's litigation conduct. Further, the complexity of PO's multi-patent/multi-defendant litigations and potential efficiencies to be gained by estopping PO from obtaining patentably indistinct claims present compelling reasons to reach this IPR's merits. §§III.D-III.D.

Regarding licensing, PO cites court filings dated September 2025 or later. Ex-2001 (referencing settlement dated Oct. 28, 2025); Ex-2002 (document filed Sept. 11, 2025 representing that claims have been resolved against Samsung); Ex-2003 (document filed Nov. 14, 2025 indicating that claims have been resolved against T-Mobile and Sprint); Ex-2004 (document filed Nov. 14, 2025 indicating that claims have been resolved against AT&T).

Even assuming these documents demonstrate PO has licensed the '571 patent (which is unclear), the alleged licensing activity does not support settled

¹⁴ PO also contends that there have been no changes in law. DD Request, 3. This neither weighs against nor in favor of discretionary denial.

expectations for multiple reasons. First, the alleged licensing evidence is dated after PO sued Amazon on August 27, 2025. Thus, it does not indicate PO expected when it sued Amazon that Amazon would not challenge the '571 patent's claims. Second, three out of four documents are dated after the Petition's filing date on October 14, 2025. *See* Paper 1; Ex-2001; Ex-2003; Ex-2004. Even assuming the Petition's filing date is the relevant date for assessing PO's settled expectations, PO's one alleged license as of the Petition filing date does not demonstrate that PO engaged in "significant licensing activity." DD Request, 2. Third, PO's licensing evidence is dated after IPRs regarding related patents had already been instituted, after the '733 FWD had issued, and in close proximity to the FWDs regarding the related '541 and '042 patents. Thus, it would be unreasonable for PO to have expected that the '571 patent's claims would not be challenged when its related patents were already subject to significant IPR activity, including many claims in related patents being held unpatentable.

b) The Petition Appropriately Relies on Obviousness Grounds and Expert Testimony

PO argues that the Petition is "not strong" because the expert declaration is nearly 200 pages and the Petition does not assert anticipatory art. DD Request, 3, 8. Neither argument has merit.

The Petition properly relies on expert testimony and does not use it to fill gaps in the prior art. *Cambridge Indus. USA, Inc. v. Applied Optoelectronics, Inc.*,

IPR2025-00434 et al., Paper 11, 2 (June 26, 2025) (declining to discretionarily deny petition and finding that “[a]lthough Patent Owner argues that discretionary denial is warranted because Petitioner is over-reliant on expert testimony, Patent Owner does not identify any portions of the expert testimony that suggest Petitioner is using its expert to fill gaps in the prior art”) (emphasis added). Like in *Cambridge*, PO does not even argue reliance on expert testimony to fill prior art gaps, let alone point to any examples. And PO cites no authority suggesting that the declaration’s length alone supports discretionary denial.

Further, PO cites no authority for its apparent assertion that the Petition is weak because it asserts obviousness. To the contrary, the Petition demonstrates that the obviousness grounds are strong, Congress explicitly identified obviousness grounds as a statutory basis for IPRs (35 U.S.C. § 311(b)), and the Director has found obviousness grounds sufficient to support institution. *See, e.g., Apple Inc.*, IPR2025-01215, Paper 1, 9 (June 27, 2025) (petition presenting three obviousness grounds and no anticipation grounds); *id.*, Paper 10, 2 (granting institution).

IV. CONCLUSION

There are persuasive reasons to reach the merits of this IPR, and PO’s request for discretionary denial should be denied.

Dated: January 22, 2026

Respectfully submitted,

/ Jessica Kaiser /

Jessica Kaiser
Reg. No. 58,937
Attorney for Petitioner

CERTIFICATE OF SERVICE

The undersigned hereby certifies that true copies of Petitioner's Brief Opposing Discretionary Denial and EXHIBITS 1052 – 1077 were served upon the below listed counsel by electronic mail:

rmirzaie@raklaw.com
mfenster@raklaw.com
dchang@raklaw.com
jmilkey@raklaw.com
nrubin@raklaw.com
pwang@raklaw.com
rak_headwater@raklaw.com

Dated: January 22, 2026

Respectfully submitted,

/ Jessica Kaiser /

Jessica Kaiser
Reg. No. 58,937
Attorney for Petitioner