

UNITED STATES PATENT AND TRADEMARK OFFICE

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BEFORE THE PATENT TRIAL AND APPEAL BOARD

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SAMSUNG ELECTRONICS CO., LTD.,  
Petitioner

v.

HEADWATER RESEARCH LLC,  
Patent Owner

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Case IPR2025-00483  
U.S. Patent No. 9,609,510

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**PETITIONER'S OPPOSITION TO PATENT OWNER'S REQUEST FOR  
DISCRETIONARY DENIAL OF INSTITUTION**

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**EXHIBITS**

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- EX1002 Excerpts from the Prosecution History of the ’510 Patent (“the Prosecution History”)
- EX1003 Expert Declaration and Curriculum Vitae of Patrick Traynor, Ph.D.
- EX1004 U.S. Publication No. 2009/0217364 (“Salmela”)
- EX1005 U.S. Publication No. 2013/0165075 (“Rishy-Maharaj”)
- EX1006 U.S. Publication No. 2010/0029273 (“Bennett”)
- EX1007 U.S. Publication No. 2012/0236760 (“Ionescu”)
- EX1008 U.S. Publication No. 2010/0222024 (“Sigmund”)
- EX1009 U.S. Publication No. 2010/0177663 (“Johansson”)
- EX1010 U.S. Patent No. 9,191,394 (“Novak”)
- EX1011 U.S. Publication No. 2009/0253409 (“Slavov”)
- EX1012 Federal Communications Commission (FCC) Regulation (2010), *available at*, <https://www.govinfo.gov/content/pkg/FR-2010-06-22/pdf/2010-15073.pdf> (“FCCReg”)
- EX1013 U.S. Publication No. 2011/0130119 (“Gupta”)
- EX1014 U.S. Publication No. 2008/0122796 (“Jobs”)
- EX1015 Samsung Galaxy SII Mobile Phone User Manual (2011), *available at* <https://ringtones.specialtyanswerservice.net/wp-content/uploads/2014/08/manuals/samsung-galaxys2-userguide.pdf>

- EX1016 iPhone User Guide For iPhone OS 3.1 Software (2009),  
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[https://cdsassets.apple.com/live/6GJYWVAV/user/ma616\\_iphone\\_ios3\\_1\\_user\\_guide.pdf](https://cdsassets.apple.com/live/6GJYWVAV/user/ma616_iphone_ios3_1_user_guide.pdf)
- EX1017 Architecture and Enablers for Optimized Radio Resource Usage in Heterogeneous Wireless Access Networks (2009), *available at*  
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- EX1018 Characterizing Radio Resource Allocation for 3G Networks (2010), *available at*  
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- EX1019 Operating System Implications of Fast, Cheap, Non-Volatile Memory (2011), *available at*  
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- EX1020 iPod touch User Guide for iOS 5.1 Software (2012), *available at*  
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- EX1021 Samsung Galaxy SIII 4G LTE Smartphone User Manual (2013), *available at*  
[https://downloadcenter.samsung.com/content/UM/202101/20210101045744723/ATT\\_SGH-I747\\_Galaxy\\_SIII\\_English\\_User\\_Manual\\_KK\\_NE4\\_F1.pdf](https://downloadcenter.samsung.com/content/UM/202101/20210101045744723/ATT_SGH-I747_Galaxy_SIII_English_User_Manual_KK_NE4_F1.pdf)
- EX1022 U.S. Publication No. 2009/0249247 (“Tseng”)
- EX1023 U.S. Patent No. 7,280,818 (“Clayton”)
- EX1024 U.S. Patent No. 8,923,824 (“Masterman”)

- EX1025            RESERVED
- EX1026            Samsung’s Stipulation Regarding Invalidity Grounds in Co-Pending District Court Litigation
- EX1027            Jacob et al., *Memory Systems: Cache, DRAM, Disk* (2007) (“Jacob”)
- EX1028            U.S. Publication No. 2012/0185636 (“Leon”)
- EX1029            U.S. Patent No. 8,060,748 (“Johansson-748”)
- EX1030            U.S. Publication No. 2006/0258289 (“Dua”)
- EX1031            European Telecommunications Standards Institute (ETSI) Technical Specification 23.003 v8.11.0 (2011), *available at* [https://www.etsi.org/deliver/etsi\\_ts/123000\\_123099/123003/08.11.00\\_60/ts\\_123003v081100p.pdf](https://www.etsi.org/deliver/etsi_ts/123000_123099/123003/08.11.00_60/ts_123003v081100p.pdf)
- EX1032            Control Servers in the Core Network (2000), *available at* <https://citeseerx.ist.psu.edu/document?repid=rep1&type=pdf&doi=1247211968f9167dbc5e7ea896bd910762e57ba7>
- EX1033            Wireless Application Protocol (WAP) Architectural Overview (2001), *available at* [https://www.openmobilealliance.org/release/Push/V2\\_1-20051122-C/WAP-250-PushArchOverview-20010703-a.pdf](https://www.openmobilealliance.org/release/Push/V2_1-20051122-C/WAP-250-PushArchOverview-20010703-a.pdf)
- EX1034-1099      RESERVED
- EX1100            Complaint for Patent Infringement in *Headwater Research LLC v. Samsung Electronics Co., Ltd. et al.*, 2-24-cv-00228 (EDTX) (Apr. 03, 2024)
- EX1101            Memorandum, Interim Procedure for Discretionary Denials in AIA Post-Grant Proceedings, June 21, 2022, *available at* [https://www.uspto.gov/sites/default/files/documents/interim\\_pr](https://www.uspto.gov/sites/default/files/documents/interim_pr)

[oc discretionary denials aia parallel district court litigation memo 20220621 .pdf](#)

- EX1102 Docket Control Order in *Headwater Research LLC v. Samsung Electronics Co., Ltd. et al.*, Case No. 2:24-cv-00228 (EDTX) (Aug. 9, 2024)
- EX1103 Disclosure of Asserted Claims and Infringement Contentions in *Headwater Research LLC v. Samsung Electronics Co., Ltd. et al.*, 2-24-cv-00228 (EDTX) (Jul. 11, 2024)
- EX1104 Stipulation
- EX-1105-1149 [RESERVED]
- EX1150 Docket Control Order, CASE NO. 2:22-cv-00422-JRG-RSP
- EX1151 Court Order, December 23, 2024, CASE NO. 2:22-cv-00422-JRG-RSP
- EX1152 Docket Control Order, CASE NO. 2:23-CV-00103-JRG-RSP
- EX1153 Court Order, February 5, 2025, CASE NO. 2:23-CV-00103-JRG-RSP
- EX1154 (Excerpts) “Taylor – Samsung Semiconductor USA,” downloaded from <https://semiconductor.samsung.com/us/sas/company/taylor/> on May 24, 2025
- EX1155 “Samsung Electronics Unveils a US\$200bn Investment Plan in the U.S.,” downloaded from <https://www.businesskorea.co.kr/news/articleView.html?idxno=97177> on May 24, 2025
- EX1156 “Samsung Electronics to receive up to \$6.4 billion in direct funding under the CHIPS and Science Act, downloaded from <https://semiconductor.sam->

[sung.com/us/sas/local-news/samsung-electronics-to-receive-up-to-6-4-billion-in-direct-funding-under-the-chips-and-science-act/](https://www.sung.com/us/sas/local-news/samsung-electronics-to-receive-up-to-6-4-billion-in-direct-funding-under-the-chips-and-science-act/) on May 24, 2025

- EX1157 “President Trump Says Samsung Is Planning a Massive Investment In The US, Calls It an Aftermath Of His Tariff Policy,” downloaded from <https://wccftech.com/president-trump-says-samsung-is-planning-a-massive-investment-in-the-us/> on May 24, 2025
- EX1158 (Excerpts) Docket Navigator Report, downloaded on May 22, 2025<sup>1</sup>
- EX1159 H.R. Rep. 112-98, pt. 1, available at <https://www.congress.gov/congressional-report/112th-congress/house-report/98/1> (last accessed on May 27, 2025)
- EX1160 Interim Process for PTAB Workload Management
- EX1161 FAQs for Interim Processes for PTAB Workload Management
- EX1162 U.S. District Court for the Eastern District of Texas Calendar Events Set for 2/3/2026-2/9/2026 for Judge Rodney Gilstrap
- EX1163 LegalMetric Individual Judge Report for Judge James Rodney Gilstrap Patent Cases December 2011 to January 2025
- EX1164 Order Granting Stay in *Maxeon Solar PTE. LTD. V. Hanwha Solutions Corp. et al.*, case no. 2:24-CV-00262-JRG (EDTX)

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<sup>1</sup> Litigation Activity Report generated using Docket Navigator, with “Parties” exactly matching “Headwater Partners I LLC,” “Headwater Partners II LLC,” or “Headwater Research LLC.”

- EX1165 Order Granting Stay in *Cellspin Soft, Inc. v. Bytedance Ltd., et al.*, case no. 2:23-CV-00496-JRG-RSP (EDTX)
- EX1166 First Amended Docket Control Order, CASE NO. 2:24-CV-00228-JRG-RSP
- EX1167 Motion Success for Stay Pending IPR (Post-Institution) (EDTX), accessed July 16, 2025
- EX1168 Second Amended Complaint for Patent Infringement in *Headwater Research LLC v. Samsung Electronics Co., Ltd. et al.*, 2-22-cv-00422 (EDTX) (March 13, 2023)
- EX1169 Docket Navigator Report of Headwater District Court Litigations, generated July 13, 2025
- EX1170 Email from Headwater Litigation Counsel Concerning Proposed Extensions to Deadlines in the Co-Pending Litigation (July 9, 2025)
- EX1171 Exhibit A to Disclosure of Asserted Claims and Infringement Contentions in *Headwater Research LLC v. Samsung Electronics Co., Ltd. et al.*, 2-24-cv-00228 (EDTX) (Jul. 11, 2024)
- EX1172 Complaint for Patent Infringement in *Headwater Research LLC v. Samsung Electronics Co., Ltd. et al.*, 2-23-cv-00103 (EDTX) (March 10, 2023)
- EX1173 Complaint for Patent Infringement in *Headwater Research LLC v. Samsung Electronics Co., Ltd. et al.*, 2-23-cv-00641 (EDTX) (December 29, 2023)
- EX1174 Federal Court Management Statistics-Profiles, U.S. District Courts—Combined Civil and Criminal (March 2025), accessed from [https://www.uscourts.gov/sites/default/files/document/fcms\\_na\\_distprofile0331.2025.pdf](https://www.uscourts.gov/sites/default/files/document/fcms_na_distprofile0331.2025.pdf)
- EX1175 ArsTechnica, Samsung Finally Gets eSIM Working in the US, available at <https://arstechnica.com/gadgets/2021/04/samsung-finally-has-esim-working-in-the-us-first-on-the-note20/>

## I. INTRODUCTION

The PTAB is best suited to consider the patentability of '510 Patent. Much like the multi-patent litigation at issue in *Tesla, Inc. v. Intellectual Ventures II LLC*, the '510 Patent at issue here is part of “complex and diverse” multi-patent litigation spanning multiple patent families and numerous diverse technologies. IPR2025-00217, Paper 9 at 2-3 (Jun. 13, 2025). As explained in more detail in §II below, Headwater is a patent assertion entity that has sequentially filed *five* lawsuits against Samsung over the last 2.5 years asserting *21* patents directed to a broad range of complex wireless and computing technologies. The '510 Patent is among those 21 asserted patents. EX1158, 2-4.<sup>2</sup> Samsung, by contrast, is a technology leader that has invested billions of dollars in new and ongoing economic activity in the United States—i.e., activity that Headwater seeks to disrupt through its aggressive litigation campaign. *See* §II.C.6; EX1155, -1156, -1157.

Numerous factors weigh in favor of an adjudication on the merits. Not only is the PTAB well-equipped to address the complex and diverse technologies at issue in the parties' dispute, but the PTAB has already proven to be essential in helping

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<sup>2</sup> This case and patent count does not include *Headwater Research LLC v. Samsung Electronics Co., Ltd. et al.*, 2-22-cv-00467 (included in EX1076), which was dismissed shortly after filing.

the parties narrow their dispute and conserve resources. *See infra*, §II. For example, after the PTAB instituted IPRs on 6 of 9 patents asserted in Headwater's first litigation, Headwater dropped from that litigation each of the patents that were subject of the instituted IPRs. The parties also later settled the instituted IPRs thereby conserving Board resources, and the first litigation went to trial on only 1 of the 9 originally asserted patents. Similarly, in Headwater's second litigation, the PTAB instituted Samsung's petitions on 2 of the 3 asserted patents. The parties settled one of the instituted IPRs and Headwater dropped the patent corresponding to the settled IPR from the litigation. In Headwater's third lawsuit, the PTAB instituted Samsung's petitions on all 4 asserted patents, but the parties again reached a resolution in which they have already settled one of the instituted IPRs and Headwater dropped the corresponding patent from the litigation. All told, PTAB institution decisions on the merits have already contributed to resolution and settlement of the parties' disputes over more than half a dozen patents. This history demonstrates that the PTAB is working in this complex, multi-patent litigation and institution decisions on the merits are likely to help narrow issues in the co-pending litigation, ultimately conserving resources of the parties, the judiciary, and the Board.

Moreover, Samsung diligently prepared and filed petitions requesting IPR of all claims of the '510 Patent months ahead of the statutory deadline. Headwater argues that the District Court in the Eastern District of Texas—where the litigation

involving the '510 Patent is pending (“the Texas litigation”)—is best suited to resolve patentability of the claims of the '510 Patent. Headwater’s brief, however, ignores the District Court’s Order, which confirms that the District Court will not address the patentability of a vast majority of claims of the '510 Patent. *See* EX2002, 5 (“no more than 5 claims”). Upon Headwater’s final election of at most five claims for assertion from the '510 Patent, ***at least forty-three (43) claims will be left unaddressed by the District Court***—i.e., approximately 90% of the '510 Patent’s claims. Samsung’s two petitions on the '510 patent, including the petition in this proceeding and in IPR2025-0484, collectively challenge ***all*** forty-eight (48) claims of the '510 Patent. The interests of efficiency and promoting a strong patent system are best served by maintaining Samsung’s challenges at the PTAB so that the patentability of ***all*** claims of the '510 Patent can be properly addressed. This is particularly important given that Headwater retains the ability to threaten Samsung with suit based on the remaining 43 claims in later district court actions, but Samsung would be statutorily barred under 35 U.S.C. § 315(b) from filing any further IPRs on the '510 Patent.

The merits of the Petition are also strong and well-supported by competent expert testimony and contemporaneous third-party evidence, including dozens of patents and printed publications that corroborate the obviousness of the claimed subject matter. Tellingly, Headwater identified ***no substantive deficiency*** in the merits

of the Petition's prior art challenges at all. This is unsurprising in light of plentiful evidence cited in the Petition that well establishes how the claims are directed to conventional features well-known in the field of art long before the '510 Patent. Not only Samsung, but the public broadly, share an interest in ensuring that all claims of the '510 Patent receive proper scrutiny from the PTAB—particularly as Headwater continues to mount an aggressive litigation campaign against multiple defendants through dozens of lawsuits in the last 2-3 years alone.

Finally, to extinguish any concerns of potential overlap between this IPR and the co-pending Texas litigation, Samsung has submitted a strong stipulation that is far more sweeping than a *Sotera* stipulation and that further estops Samsung (in the event institution is granted) from relying on combinations of the prior art asserted in this proceeding with unpublished system prior art (or any other type of prior art). EX1104; *see Motorola Solutions, Inc. v. Stellar, LLC*, IPR2024-01205, IPR2024-01206, IPR2024-01207 & IPR2024-01208, Paper 19 (PTAB Mar. 28, 2025)).

Thus, under the facts of this case and given the present record, Samsung respectfully requests that the Director decline Headwater's request to discretionarily deny institution of this IPR and refer Samsung's Petition for a determination on the merits.

## **II. THE PETITION SHOULD NOT BE DENIED ON DISCRETIONARY GROUNDS**

Headwater seeks to shield the '510 Patent from an adjudication on the merits by requesting discretionary denial of this IPR proceeding. Headwater purports that an assessment of the *Fintiv* factors and three additional considerations recited in Director Stewart's Memorandum of March 26, 2025 counsels in favor of discretionary denial.<sup>3</sup> EX1160; Discretion Briefing (DB), 6-26. Contrary to Headwater's contentions, however, and as explained below, a holistic evaluation of the *Fintiv* factors and the additional considerations in the Stewart Memorandum confirm that discretionary denial of the Petition is not warranted.

### **A. The Complexity and Diverse Technology of the Asserted Patents Favors Institution**

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<sup>3</sup> Headwater does not address any considerations or argue for discretionary denial under *General Plastic*, *Advanced Bionics*, or parallel Petition guidelines. *See generally* DB. Samsung in turn does not address such considerations in this paper but reserves the right to do so if Headwater later raises such issues. Samsung notes that it has described the basis for two petitions addressing all 48 of Headwater's originally asserted claims in its ranking paper that was submitted with the Petition. *See also* Paper 3 (Petitioner's Notice Ranking Petitions in IPR2025-00483 and IPR2025-00484).

Headwater's assertion of a "large number and vast scope of [] patents" directed toward "a diverse range of subject matter" in the parallel district court proceeding is the precise situation for which "the Board is better suited to review" issues of validity, just as was the case in *Tesla, Inc. v. Intellectual Ventures II LLC* IPR2025-00217, Paper 9 at 2-3 (Jun. 13, 2025). The '510 Patent challenged in this proceeding is but one of 21 patents that Headwater has asserted against Samsung across five litigations in the last 2.5 years alone. EX1158. Against this barrage of lawsuits, Samsung has asked the Office to apply much-needed scrutiny to Headwater's patents and has filed a total of 26 IPR petitions on the same. While the proceedings inspired by some of these petitions have since terminated, 11 petitions remain pending, of which 5 are already instituted and 6 await decisions on discretion or institution.<sup>4</sup> Samsung's pending petitions alone seek review of 10 different patents and span a broad range of technologies and claim scope in the general areas of computing devices and wireless networks, including:

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<sup>4</sup> Samsung's petitions in IPR2025-00426 IPR2024-00341, IPR2024-01337, IPR2024-01396, IPR2024-01407 are currently instituted. Additional petitions in IPR2025-00481, IPR2025-00482, IPR2025-00483, IPR2025-00484, IPR2025-00932, and IPR2025-00963 are pending decisions on discretion or institution.

- “[A] services policy communication system and method. In some embodiments, a communications device stores a set of device credentials for activating the communications device for a service on a network; and sends an access request to the network, the access request including the set of device credentials.” (U.S. Patent No. 11,096,055, Abstract)
- “[I]mplementing a service profile executed at least in part in a secure execution environment of a processor of a communications device for assisting control of the communications device use of a service on a wireless network, in which the service profile includes a plurality of service policy settings, and wherein the service profile is associated with a service plan that provides for access to the service on the wireless network.” (U.S. Patent No. 11,405,429, Abstract)
- “Devices, systems, and non-transitory computer-readable storage media for updating wireless device credentials[.] ...[O]btain an indication of a user request to replace a particular credential with a target credential, detect a network-provisioning state change, determine that the particular credential does not match the target credential, initiate a programming session with a network element over a wireless access network, obtain an updated credential from the network element, and assist in storing the updated credential in memory.” (U.S. Patent No. 9,609,510, Abstract)

- “Enterprise and consumer billing allocation for wireless communication device service usage activities is provided. In some embodiments, enterprise and consumer billing allocation for wireless communication device service usage activities includes monitoring a service usage activity of a wireless communication device, and determining an enterprise and consumer billing allocation for the monitored service usage activity.” (U.S. Patent No. 10,080,250, Abstract)

- “A wireless end-user device has a wireless wide-area network (WWAN) modem and multiple execution environments. Applications execute in an application execution partition. A kernel execution partition executes processes for classifying, by application, traffic passing between the WWAN modem and the applications, measuring per-application traffic, and applying per-application traffic policies to the traffic.” (U.S. Patent No. 10,028,144, Abstract)

- “[A] service control device link agent receives an encrypted agent message from the service control server link element over the secure service control link, uses an encryption key to obtain a decrypted agent message comprising a particular agent identifier and message content for delivery to

the particular device agent, and, based on the particular agent identifier, delivers the message content to the particular device agent over the agent communication bus.” (U.S. Patent No. 8,406,733, Abstract)

- “[A] communications device implements a service policy for assisting billing for the communications device use of a service on a network; and monitors use of the service based on the service policy, in which a local service usage is synchronized with a network based service usage.” (U.S. Patent No. 8,588,110, Abstract)

- “A wireless end-user device has a wireless modem, a network stack configurable to receive and transmit data via the modem and a wireless network, and two Application Programming Interfaces (APIs) available to device applications. The first API allows applications to open and use data flows via the network stack. The second API allows applications to make data transfer requests for media objects associated with network resource identifiers.” (U.S. Patent No. 9,647,918, Abstract)

- “A wireless end-user device has wireless wide-area network (WWAN) and wireless local-area network (WLAN) modems. One or more processors apply a WWAN-specific differential traffic control policy to Internet data service provided using the WWAN modem.” (U.S. Patent No. 9,179,359, Abstract)

As illustrated by the examples above, even just the subset of Headwater's asserted patents that are the subject of pending IPRs cover a broad array of complex subject matter including wireless link quality estimation, mobile device credential provisioning, secure execution and processing environments, enterprise and consumer billing allocation, wireless modem architectures, traffic monitoring and measurement, encryption methodologies, application programming interfaces (APIs), and traffic control policies. Such diverse and complex technology strongly favors institution. *Tesla*, IPR2025-00217, Paper 9 at 2-3. As was the case in *Tesla*, "the Board is better suited to review a large number of patents involving diverse subject matter." *Id.* Moreover, Samsung's IPR challenges on 4 other patents in Headwater's multi-patent litigation have already been instituted and remain pending. *See* IPR2025-00426, IPR2024-00341, IPR2024-01337, IPR2024-01396, IPR2024-01407. Interests of efficiency, justice, and the promotion of a strong patent system favor continued PTAB review of Headwater's patents, including referring the present Petition for adjudication on the merits.

As noted above, the PTAB has also proven to be essential in helping the parties narrow their dispute and conserve resources. For example, after the PTAB instituted IPRs on 6 of 9 patents asserted in Headwater's first litigation, Headwater dropped from that litigation each of the patents that were subject of the instituted IPRs. EX1168; IPR2023-1157, -1226, -1250, -1336, -1337, -1360. The parties

also later settled the instituted IPRs thereby conserving Board resources and the first litigation went to trial on only 1 of the 9 originally asserted patents. Similarly, in Headwater's second litigation, the PTAB instituted Samsung's petitions on 2 of the 3 asserted patents. EX1172; IPR2024-00010, -00341. The parties settled one of the instituted IPRs and Headwater dropped the patent corresponding to the settled IPR from the litigation. In Headwater's third lawsuit, the PTAB instituted Samsung's petitions on all 4 asserted patents, but the parties again reached a resolution in which they have already settled one of the instituted IPRs and Headwater dropped the corresponding patent from the litigation. EX1173; IPR2024-01051, -01337, -01407, -01396. All told, PTAB institution decisions on the merits have already contributed to resolution and settlement of the parties' disputes over more than half a dozen patents. This history demonstrates that the PTAB is working in this complex, multi-patent litigation and institution decisions on the merits are likely to help narrow issues in the co-pending litigation, ultimately conserving resources of the parties, the judiciary, and the Board.

**B. Discretionary Denial is Not Warranted Under *Fintiv***

Headwater urges discretionary denial based on incomplete facts about the co-pending District Court litigation and a misguided application of the *Fintiv* factors.

As explained below, a majority of the *Fintiv* factors weigh strongly against discretionary denial. *See Apple Inc. v. Fintiv, Inc.*, IPR2020-00019, Paper 11 at 5-6 (PTAB Mar. 20, 2020) (precedential) (“*Fintiv I*”).

*1. Factor 1: No Stay Has Been Requested*

*Fintiv* Factor 1 looks to “whether the court granted a stay or evidence exists that one may be granted if a proceeding is instituted.” This factor is neutral given that no litigation stay has been requested and no evidence clearly establishes how the district court would resolve such a request even if a stay were requested upon institution.

As a starting point, neither party has requested a stay of the litigation. Headwater does not dispute this fact. *See* DB, 7-13. Still, attempting to tilt this factor in its favor, Headwater starts by citing various cases from the Eastern District of Texas where a motion to stay was filed in the co-pending litigation *prior to institution in the IPR* and the motion was denied. However, the critical inquiry under this factor is whether “evidence exists” that a stay will be “granted *if a proceeding is instituted.*” *See Luminati Networks Ltd. v. Teso LT, UAB*, No. 2:19-CV-00395-JRG, 2020 WL 6803255, at \*1 (E.D. Tex. Oct. 30, 2020); *Trover Grp., Inc. v. Dedicated Micros USA*, No. 2:13-CV1047-WCB, 2015 WL 1069179, at \*6 (E.D. Tex. Mar. 11, 2015) (Bryson, J.); *Viavi Sols. Inc. v. Zhejiang Crystal-Optech Co.*, No. 2:21-CV-00378-JRG, 2022 WL 16856099, at \*5 (E.D. Tex. Nov. 10, 2022).

Headwater cites no case that precludes the possibility of a stay being granted in the Eastern District of Texas *after institution*. On the contrary, Headwater acknowledges, as it must, that EDTX does not automatically deny stays *after institution*, although Headwater still paints a misleading picture that the outcome of any stay requested after institution here would almost certainly be denied. Indeed, Headwater omits the fact that Judge Gilstrap and Magistrate Judge Payne have granted post-institution motions for stay where the defendant/petitioner has made a strong stipulation to be bound by IPR estoppel—exactly as Samsung has done here with a stipulation (EX1104) that is far broader than even the IPR estoppel provisions. *See e.g.*, EX1164; EX1165. Magistrate Judge Payne has also explained that stays in patent cases do not unduly prejudice plaintiffs that do not produce a product (e.g., litigation entities like Headwater) because a “mere delay in collecting ... damages does not constitute undue prejudice.” EX1165 (citing *Uniloc USA, Inc. v. Acronis, Inc.*, No. 615-cv-1001-RWS-KNM, 2017 WL 2899690, at \*2 (E.D. Tex. Feb. 9, 2017)). Headwater’s own data likewise shows an *increase* in the number of stays granted in the district over the last three years with at least twenty percent of cases stayed last year alone.<sup>5</sup> DB, 9; EX2001.

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<sup>5</sup> The Docket Navigator statistics presented in Headwater’s EX-2001 are also misleading insofar as they do not distinguish between stays requested before and after

Despite its denials, Headwater’s brief ultimately wades into impermissible speculation on how “likely” it is for the District Court to grant a stay of the co-pending litigation. DB, 4-6. But motions to stay invoke fact- and case-specific considerations, and it would be highly prejudicial to Samsung for adverse inferences to be drawn from rulings on stay motions being denied in different and unrelated cases. Indeed, for these reasons, the Board has repeatedly refused to “attempt to predict” how a District Court will rule on such stay motions. *See, e.g., Hulu, LLC v. SITO Mobile R&D IP, LLC*, IPR2021-00298, Paper 11 at 10-11 (May 19, 2021) (because “neither party has produced evidence that a stay has been requested[,]” “[w]e decline to infer, based on actions taken in a different case with different facts, how the District Court would rule should a stay be requested by the parties in the parallel case here.”) (partially quoting *Fintiv*); *Sand Revolution II, LLC v. Continental Intermodal Group-Trucking LLC*, IPR2019-01393, Paper 24 at 7 (June 16, 2020) (informative).

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IPR institution, or even provide any indication that these stays were with respect to a co-pending IPR. Among decisions made in EDTX last year on motions to stay that were brought *after institution*, an even higher 28 percentage of these motions were granted (i.e., 7 of 25 cases). EX-1167. To date in 2025, EDTX has granted 37 percent of post-institution motions to stay (i.e., 6 of 16 cases). *Id.*

2. *Factor 2: The Court's Trial Date is Speculative and the Trial will Not Address Patentability of a Majority of Claims Challenged in Samsung's Diligently Filed Petition*

*Fintiv* Factor 2 looks to “proximity of the court’s trial date to the Board’s projected statutory deadline for a final written decision” as part of a holistic evaluation of fairness and efficiency, which includes considering which forum will assess the patentability of the challenged claims. *See Fintiv I*, at 5-6; *see also Apple Inc. v. Fintiv, Inc.*, IPR2020-00019, Paper 15 at 7-17 (PTAB May 13, 2020) (informative) (“*Fintiv II*”) (explaining that, in evaluating the *Fintiv* factors, the Board “takes a holistic view of whether efficiency and integrity of the system are best served by denying or instituting review”); *Illumina, Inc. v. Natera, Inc.*, IPR2019-01201, Paper 19 at 6 (PTAB Dec. 18, 2019) (“We have considered the positions of the parties and find that, on this record, considerations of efficiency, fairness, and the merits of the grounds in the Petition do not weigh in favor of denying the Petition.”). This factor weighs against discretionary denial or at worst, is neutral.

As a starting point, trial dates routinely change, as Headwater concedes. DB, 6. Further, such trial date changes are common in the Eastern District of Texas. Indeed, in two prior Headwater suits filed against Samsung, the actual trial occurred **3-5 months** after the originally-scheduled trial date. EX1150; EX1151; EX1152; EX1153. The Office has likewise recognized that “scheduled trial dates are unreliable and often change.” EX1101, 8. Thus, while the District Court trial is currently

scheduled (February 9, 2026) to occur before the Board's expected deadline (October 16, 2026) to issue a Final Written Decision, that time difference is likely to be reduced significantly if history is a guide. Moreover, the median time-to-trial for civil cases in EDTX has increased to 25.9 months according to current statistics, which would project trial to begin in June 2026—months after the currently scheduled date. EX1174, 35.

To be sure, the prospect of the currently scheduled trial date being delayed is significant given that Judge Gilstrap currently has *fifteen* trials simultaneously scheduled to start jury selection on February 9, 2026, only one of which is the Headwater litigation. EX1162, 2-8; EX1165. Twelve of the fifteen cases involve complex patent disputes. *Id.* By advocating for discretionary denial based on the scheduled jury selection date, Headwater assumes without basis that Judge Gilstrap will prioritize Headwater's litigation over the *fourteen other* cases scheduled to begin jury selection on the same day. Even if no one of the fifteen cases were favored over the others, the likelihood that Headwater's litigation would be the one selected to start jury selection on February 9, 2026 is small—less than 7% (i.e., 1/15).

Headwater also fails to acknowledge the significant amount of time required to reach a final judgment ripe for any appeal—after the resolution of post-trial motions. A recent analysis of cases before Judge Gilstrap shows that post-trial motions are not resolved on average for *6.9 months* after a jury trial. EX1163, 2. Even if

jury selection for trial in the Headwater litigation did begin on February 9, 2026, the “final resolution” (if it occurs at all) would likely not occur until sometime after September 2026. In the more likely event that trial in EDTX is delayed such that jury selection does not begin until well after February 9, 2026, ***the final resolution of the EDTX proceeding likely will not occur until after the Board’s Final Written Decision*** that is expected to issue by October 16, 2026.<sup>6</sup>

Contrary to Headwater’s assertion, Samsung was diligent in filing petitions in this and a related proceeding (IPR20245-00484) that collectively challenge all **48** claims of the ’510 patent about two months before the statutory deadline—despite the fact that Samsung was simultaneously managing multiple district court cases and at least ten other IPRs on various patents asserted by Headwater. *See* IPR2025-

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<sup>6</sup> Note that the Petition was filed on February 10, 2025, although the Board’s Notice According a Filing Date (NAFD) to the Petition was not received for ***more than two months*** until April 16, 2025. *See* Paper 4. This is markedly longer than the average time between Petition filing and issuance of the NAFD, although the parties have no control over when the NAFD issues. It stands to reason that, had the NAFD issued a month or more earlier, the Board’s FWD in this IPR would issue with corresponding more time before post-trial motions are likely to be resolved in the EDTX proceeding.

00963, -00962, -00484, -00481, -00482, -00426, -01396, -01407, -01337, 00341.

Headwater also argues, incorrectly, that an earlier District Court trial date (even assuming *arguendo* that date does not change) means “the question of patentability of [*sic*] will already be resolved by the District Court” prior to the Final Written Decision. DB, 14. Not true. The District Court will never resolve the patentability of a vast majority of the claims of the ’510 Patent in the current EDTX litigation. Indeed, as Headwater is aware, the District Court has required Headwater to limit its election of asserted claims to just *five* claims per patent. In other words, while Headwater initially asserted all 48 claims of the ’510 Patent against Samsung, the District Court’s trial will at most address the validity of only the selected five or fewer claims.

July 15, 2025	N/A	Secondary Election of Asserted Claims Plaintiff shall serve a Secondary Election of Asserted Claims, identifying no more than 5 claims per asserted patent.
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EX2002, 5. What’s more, the above-referenced order does not foreclose Headwater from asserting the other claims in a future litigation against Samsung (at which time, Samsung will no longer have the ability to file an IPR). Thus, efficiency and fairness dictate a resolution of the patentability as to all claims, which is only possible at the PTAB through consideration of Samsung’s petitions.

In summary, *Fintiv* factor 2 weighs against discretionary denial because the

District Court’s trial date is speculative and because the District Court will not address the patentability of ~90% of the ’510 Patent’s claims, which Samsung challenged in the Petitions that it diligently filed nearly two months ahead of the one-year statutory deadline.

3. *Factor 3: Limited Resources Would Have Been Expended by the Time of the Decision on Institution*

*Fintiv* factor 3—which considers the “amount and type of work already completed in the parallel litigation by the court and the parties at the time of the institution decision”—also favors institution.

As of the Petition’s filing, the parties had only exchanged infringement and invalidity contentions. *See* EX1102; EX2002. As of the filing of this paper, while claim construction briefing has progressed, the case has not otherwise advanced much since the filing of the Petition, e.g., no depositions have been scheduled or have occurred. Moreover, Headwater’s assertions of the “significant resources” that would be invested in the District Court as of the Decision on Institution are misleading. *See* DB, 14-16. For example, while claim construction briefing will have completed and the claim construction hearing will have occurred before the decision on institution (expected around mid-to-late August)<sup>7</sup>, expert discovery and dispositive

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<sup>7</sup> As noted above, the Petition was filed on February 10, 2025, although the Board’s

motion briefing will not yet have concluded. *See* EX1011, 3; EX2002, 3. Moreover, Headwater has recently requested an extension of deadlines in the litigation, thus leaving the actual dates that these deadlines will fall uncertain at best and likely to be delayed further. EX1170.

By the time a Decision on Institution is entered in this proceeding, far more

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Notice According a Filing Date (NAFD) to the Petition was not received for *more than two months* until April 16, 2025. *See* Paper 4. This is markedly longer than the average time between Petition filing and issuance of the NAFD, although the parties have no control over when the NAFD issues. Had the NAFD issued earlier, the institution decision would be expected around the same time as the claim construction hearing in the EDTX proceeding, before most depositions would have occurred during fact discovery, and before any expert reports would have been due in the litigation. The Court's Order does not specify when the claim construction order will be issued. *See* EX1166; EX2002. By contrast, Samsung's Petition on a separate Headwater patent asserted in the same EDTX litigation was filed only two weeks before the present Petition, but was accorded a filing date *seven weeks* before the NAFD issued in this proceeding. *See* IPR2025-00482, Paper 6. Samsung should not be held accountable for additional investment in the litigation resulting from the unusually long pendency of this Petition before the NAFD issued.

investment will remain in the litigation. This further counsels against discretionary denial, or at worst, renders Factor 3 neutral.

4. *Factor 4: No Overlap Between This IPR and the District Court Proceeding*

*Fintiv* factor 4—which considers overlap between issues raised in the Petition and in the parallel proceeding—strongly favors institution. As described above, the grounds raised in this and Samsung’s co-pending petition in IPR2025-00484 collectively address **all 48 claims** of the ’510 patent—a substantial majority of which will not be adjudicated in the co-pending litigation (i.e., at least 43 claims will not be adjudicated after Headwater makes its final election of at most five asserted claims from the ’510 patent). Samsung’s broad stipulation—even more sweeping than *Sotera*—further eliminates any potential overlap between the proceedings relating to the minority subset of claims that Headwater may assert at trial. *See* EX1104.

In more detail, Headwater’s contention that complete overlap exists between the claims asserted in District Court and the claims challenged in Samsung’s petitions is false. *See* DB, 17. As explained above, while Headwater’s **initial** infringement contentions asserted all 48 claims of the ’510 Patent, the District Court has ordered Headwater to make a **final** election of no more than **five** asserted claims per patent. EX1011; EX2002, 5 (“no more than 5 claims”).

Thus, the extent of any perceived overlap is limited to at most five of the 48 claims in the ’510 Patent—not all claims, as Headwater implies. In other words, **at**

*least 43* of the patent’s claims will go unaddressed in the District Court, particularly as the case advances through discovery and to trial. Therefore, Headwater’s statement—“if the Board were to grant institution in this proceeding, it would be considering the *same claims* of the ’510 Patent whose validity would have been previously tried before the District Court”—is untrue insofar as it fails to acknowledge that *~90% of the claims challenged in Samsung’s IPRs on the ’510 Patent ultimately will not be adjudicated in District Court*. DB, 22 (emphasis added).

Additionally, to eliminate any possible perception of overlap between the PTAB and District Court, Samsung filed a stipulation (EX1104) providing that, if the PTAB institutes review, Samsung will not pursue in District Court litigation:

- the specific grounds asserted in *inter partes* review in IPR2025-00483 and IPR2025-00484, or any other ground that could have been reasonably raised in these proceeding (i.e., any ground that could have been raised under §§102 or 103 on the basis of prior art patents or printed publications) (*see Sotera Wireless, Inc. v. Masimo Corporation*, IPR2020-01019, Paper 12 (PTAB Dec. 1, 2020)); and
- combinations of the prior art asserted in whichever proceeding(s) are instituted with unpublished system prior art (or any other type of prior art) (*see Motorola Solutions, Inc. v. Stellar, LLC*, IPR2024-01205, IPR2024-01206, IPR2024-01207 & IPR2024-01208, Paper 19 (PTAB

Mar. 28, 2025)).

Headwater’s attempt to dismiss Samsung’s stipulation as a mere “*Sotera*-type” stipulation that “is no longer sufficient to determine that *Fintiv* Factor 4 weighs in favor of institution” misrepresents the scope of Samsung’s stipulation. DB, 19-20. Samsung’s stipulation here is far ***more sweeping*** than a traditional *Sotera* stipulation and goes further to allay the concerns raised in the Director’s *Motorola* decision (*see id.*) by additionally precluding Samsung’s reliance (upon institution) on combinations of art asserted in the proceeding with unpublished system art or any other type of prior art for that matter.<sup>8</sup>

To be clear, Samsung’s stipulation here is likewise more robust than the *Sotera* stipulation addressed in *Motorola*. Samsung’s stipulation guarantees that, if instituted, none of the prior art asserted in the Petition will be used in the District Court proceeding—even in combination with unpublished system art. For example, Samsung’s Petition relies on Salmela (EX1004) as the primary prior art reference to

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<sup>8</sup> Headwater also argues that Samsung’s stipulation permits a subsequent *ex parte* reexamination on grounds that could have been raised in the Petition. DB, 12-13. This argument is speculative and also incorrect because, if an IPR is instituted here and proceeds to a Final Written Decision, Samsung would be estopped from using the grounds used in the Petition in a subsequently-filed *ex parte* reexamination.

address a majority of limitations in independent claims 1 and 47 of the '510 Patent. If the Petition is instituted, Samsung has agreed through its stipulation to forego reliance on Salmela in the EDTX litigation altogether, whether on its own, in combination with other patents or printed publications that could have been reasonably raised in IPR, or even in combination with unpublished system art that could not have been raised in IPR in the first instance. Samsung's stipulation provides the same guarantees for each of the prior art references applied in both this proceeding and related IPR2024-00584. Samsung's stipulation thus addresses the specific concern expressed in *Motorola* that "Petitioner's invalidity arguments in the district court ... include combinations of the prior art asserted in these proceedings with unpublished system art." *Motorola*, 4.

Headwater's brief also glosses over a significant fact, namely that Samsung has *never included Rishy-Maharaj (EX1005) in its invalidity contentions* in District Court. *See* EX2004. Yet, Samsung relies on Rishy-Maharaj in all grounds and against all claims of the '510 Patent in both this proceeding and related IPR2025-00484. Pet., 1-2. There is accordingly no possibility of Samsung raising the same set of prior art or the same grounds in District Court as those raised in the IPR petitions, whether the IPR petitions are instituted or not. Accordingly, even from the earliest stages of the litigation and the IPRs, Samsung has pursued alternative and non-overlapping invalidity grounds in each forum. Headwater's citation to the *SAP*

*America* case is thus inapt because, unlike the situation in *SAP America*, it is not true that the same “work that would be done [in the IPR] will also be required in the litigation regardless of whether we institute review.”<sup>9</sup> *SAP America, Inc. v. Cyandia, Inc.*, IPR2024-01496, ID at 6; DB, 20.

Finally, Headwater’s argument that the Director should exercise discretion to deny institution because “Petitioner’s stipulation still permits subsequent *ex parte* reexamination petitions on grounds that could have been raised in the Petition” has no merit. DB, 21. As an initial matter, Factor 4 concerns overlap between the IPR and *a parallel proceeding*, but no parallel *ex parte* reexamination exists in this case. This is because Samsung has never filed a request for *ex parte* reexamination on the ’510 Patent. Headwater’s objection is thus speculative at best. Headwater’s concerns are also drastically overplayed because if IPR is instituted and proceeds to a Final Written Decision, Samsung would be estopped from using the Petition grounds, or any other grounds that could have been reasonably raised in an IPR, in an *ex parte* reexamination. 35 U.S.C. § 315(e)(1). Moreover, the Office already enforces various other policies to protect patent owners against abusive reexamina-

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<sup>9</sup> Samsung’s stipulation in this IPR is also stronger than the *Sotera* stipulation that the Board found deficient in *SAP America*.

tion filings. For example, if another proceeding is filed at the Office during pendency of an IPR, the Director (or the Board by delegation) “determine[s] the manner in which the [IPR] or other proceeding or matter may proceed, including providing for stay, transfer, consolidation, or termination of any such matter or proceeding.” 35 U.S.C. § 315(d). The Office has also dismissed *ex parte* reexamination requests that were deemed abusive or that were otherwise based on substantially the same prior art or arguments previously presented to the Office under § 325(d). *See* 35 U.S.C. § 325(d); *In re Vivint, Inc.*, 14 F.4th 1342 (Fed. Cir. 2021).

In sum, there will be virtually no overlap between this proceeding and the parallel District Court litigation if IPR is instituted. The District Court will not address at least 43 of the 48 claims challenged in Samsung’s petitions, Samsung’s petitions are based on prior art combinations that have never even been raised in District Court (e.g., combinations based on Rishy-Maharaj), and Samsung’s stipulation is even more expansive than *Sotera* thus ensuring that the Office’s goals of “efficiency and integrity” will be achieved by “not duplicating efforts” and “resolving materially different patentability issues.” *Apple, Inc. v. SEVEN Networks, LLC*, IPR2020-00156, Paper 10, 19 (June 15, 2020); *Sand Revolution II, LLC v. Continental Intermodal Group-Trucking LLC*, IPR2019-01393, Paper 24, 12 (June 16, 2020); *Google LLC v. Flypsi, Inc.*, IPR2023-00360, Paper 9, 36-39 (August 2, 2023). Therefore, *Fintiv* factor 4 strongly favors institution.

5. *Factor 5: The Same Parties are in the Co-Pending Litigation*

*Fintiv* Factor 5—The parties are in this IPR are also parties in the co-pending Texas litigation.

6. *Factor 6: Headwater’s Identified “Other Circumstances” Lack Merit and Do Not Weigh in Favor of Discretionary Denial*

As explained below, Headwater’s arguments regarding “other circumstances that impact the Board’s exercise of discretion” lack merit and do not counsel in favor of discretionary denial.

**First**, Headwater asserts that “Petitioner waited nearly an entire year to file its Petition, all but ensuring that the validity of the ’510 patent claims would be decided in the District Court litigation months prior to any Final Written Decision in these proceedings.” DB, 23 This assertion fails for at least two reasons: (i) the Petition was filed nearly two months ahead of the one-year statutory deadline, not “nearly an entire year,” as Headwater contends, and (ii) as described above, the District Court will not consider the patentability of at least 43 of the 48 claims (i.e., ~90% of the claims) challenged in Samsung’s petitions on the ’510 Patent.

**Second**, Headwater makes a baseless assertion that “the Petition fails to present any compelling merits of unpatentability.” DB, 23. Tellingly, however, Headwater was unable to identify, let alone allege, even a single deficiency in the Petition’s analysis of the prior art grounds or their relevance to the ’510 Patent claims.

Headwater's argument is entirely superficial and based on: (i) a meaningless observation that the Petition does not present any anticipation grounds; and (ii) a speculative promise to highlight specific deficiencies "in its POPR merit-based briefing." *See* DB, 23-24. Neither reason supports discretionary denial. Headwater's first assertion ignores that obviousness has long been recognized as a basis for unpatentability and was expressly identified by Congress as a statutory basis for IPRs. *See Graham v. John Deere Co. of Kan. City*, 383 U.S. 1, 3-4 (1966) (obviousness "was intended to codify judicial precedents embracing the principle long ago announced by this Court in *Hotchkiss v. Greenwood*, 52 U.S. 248 (1850)"); 35 U.S.C. §311(b). The Board has consistently instituted IPRs on obviousness grounds, and Headwater has failed to identify a single instance in which the Board found that reliance on obviousness alone undermined the merits of a Petition. Headwater also cannot seriously urge discretionary denial based on merits considerations when Headwater either could not or would not identify any substantive deficiency in the Petition at all.

**Third**, Headwater asserts that "additional conditions' weigh in favor of discretionary denial, including the Petition's over-reliance on expert testimony to gap-fill holes in the prior art, as well as the length of time the challenged claims have been in effect." DB, 23-24. This argument also lacks merit. The cited expert testimony is not used to "gap-fill holes in the prior art," and tellingly, Headwater did not identify even a single example of alleged gap filling. *See generally* DB.

Headwater also makes much of the fact that the exhibit containing Dr. Traynor's expert declaration is 216 pages in length. But Headwater fails to acknowledge that this page count includes 48 pages of an appendix for Dr. Traynor's *curriculum vitae* (CV) and at least 15 pages of preliminary testimony (e.g., an introduction, an overview of Dr. Traynor's background/qualifications, list of materials considered, and applied legal standards). Further, Dr. Traynor submitted just a *single, combined* declaration that addresses issues for both this proceeding and related IPR2024-00484, thereby addressing all 48 claims of the '510 Patent in one document. Headwater conveniently ignores this context. Petitioner addresses the expert declaration in further detail below in Section II.C.

In summary, a holistic evaluation of the *Fintiv* factors strongly counsel against discretionary denial at least because this PTAB proceeding will allow a just and efficient resolution of the patentability of *all* claims of the '510 Patent (unlike the District Court litigation), while significantly ameliorating overlapping or duplicative functions being performed in the co-pending litigation.

**C. Additional Considerations in the Stewart Memorandum Also Counsel Against Discretionary Denial**

The Stewart Memorandum dated March 26, 2025, titled "Interim Process for PTAB Workload Management," identified additional considerations that may be

evaluated when addressing discretionary issues. EX1160. These considerations include:

1. Whether the PTAB or another forum has already adjudicated the validity or patentability of the challenged patent claims;
2. Whether there have been changes in the law or new judicial precedent issued since issuance of the claims that may affect patentability;
3. The strength of the unpatentability challenge;
4. The extent of the Petition's reliance on expert testimony;
5. Settled expectations of the parties, such as the length of time the claims have been in force;
6. Compelling economic, public health, or national security interests; and
7. Any other considerations bearing on the Director's discretion.

Headwater's briefing only addresses considerations numbered 2 – 5 above. *See* DB, 24-26. As explained below, however, a proper consideration of these considerations confirms that discretionary denial is not warranted, and that conclusion is only reinforced by the other considerations recited in the Stewart Memorandum that Headwater omitted from its analysis.

*1. Whether the PTAB or another forum has already adjudicated the validity or patentability of the challenged patent claims*

No other forum has already adjudicated the validity of the challenged claims.

And, as explained in §II.B *supra*, the District Court will not address the validity of

a vast majority of the '510 Patent's claims and will not consider overlapping prior art if institution is granted, leaving the PTAB as the only forum to resolve these issues.

2. *Whether there have been changes in the law or new judicial precedent issued since issuance of the claims that may affect patentability*

As explained in the Petition and as further confirmed by this brief, the strong merits of the Petition demonstrate that the '510 Patent's claims are unpatentable in view of the prior art and grounds—which grounds were not previously before the Patent Office during the examination. There has been no change in law or judicial precedent, particularly as it relates to obviousness under Section 103, that would alter a determination of unpatentability of these claims. Headwater identifies nothing to the contrary.

3. *The strength of the unpatentability challenge*

The Petition presents a straightforward, two-reference obviousness ground that is especially strong on the merits. As noted above (*supra*, §II.B (Factor 6)), Headwater's discretionary denial brief identifies no substantive deficiency in the obviousness ground at all. Moreover, the '510 Patent received limited scrutiny during original examination, having been allowed following the applicant's response to just a single prior art rejection—despite Headwater citing an overwhelming 1,500+ references to the Examiner. EX1001, Cover; Pet., 4; *generally* EX1002.

Rishy-Maharaj was not among the cited references, and indeed, there is no indication in the file history that the Examiner ever considered Rishy-Maharaj or the Salmela-Rishy-Maharaj combination that forms the basis of the Petition's obviousness challenge during original examination of the '510 Patent. *See* EX1159, 30-40, 47-48 (explaining that post grant proceedings were designed to serve the goal of improving patent quality by enabling efficient challenges to patents that should not have been issued in the first instance).

4. *The extent of the Petition's reliance on expert testimony*

The Petition is supported by the expert declaration of Dr. Patrick Traynor. *See* EX1003. Dr. Traynor's declaration includes testimony, which is not only guided by years of education and experience, but is further corroborated by ample documentary evidence including dozens of additional exhibits that confirm and amplify the positions and unpatentability arguments advanced in the Petition.

While identifying no instance where the expert declaration relied on bare testimony to fill a gap in the art, Patent Owner nonetheless points to the fact that the expert declaration exhibit (EX1003) is 216 pages long. DB, 25-26.<sup>10</sup> As noted above, however, Headwater fails to acknowledge that this page count includes 48

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<sup>10</sup> In its page count, Headwater misleadingly includes Dr. Traynor's experiences, CV, POSITA definition, and understanding of legal standards.

pages of an appendix for Dr. Traynor’s *curriculum vitae* (CV) and at least 15 pages of preliminary testimony (e.g., an introduction, an overview of Dr. Traynor’s background/qualifications, list of materials considered, and applied legal standards). Further, Dr. Traynor submitted just a *single* declaration for both this proceeding and related IPR2024-00484 to address all 48 claims of the ’510 Patent in one document. Much of Dr. Traynor’s analysis in the declaration pertains exclusively to claims challenged only in the -00484 proceeding and is therefore not relevant to the overall page count.

As the PTAB further clarified in its “FAQs for Interim Processes for PTAB Workload Management,” “[i]t is most helpful if an expert is providing focused testimony, for example to provide helpful context or to explain terms of art.” EX1160, 6. Consistent with this guidance, Dr. Traynor’s expert declaration provides such context and explanations. For example, Dr. Traynor provides corroborated testimony describing the state of the art of user interfaces by the Critical Date of the ’510 Patent (EX1003, ¶96 (citing corroborating exhibits EX1014, EX1015, EX1016)); corroborated testimony regarding the conventional use of memory in wireless devices by the Critical Date of the ’510 Patent (EX1003, ¶102 (citing corroborating exhibits EX1014, EX1015, EX1016)); corroborated testimony regarding the state of the art related to the use of subscription credentials in wireless devices by the Critical Date of the ’510 Patent (EX1003, ¶113 (citing corroborating exhibit EX1027)); and

corroborated testimony regarding conventional components of cellular networks that commonly implemented as of the Critical Date of the '510 Patent (EX1003, ¶136 (citing corroborating exhibits EX1017, EX1018)). Additionally, Dr. Traynor's provides detailed technical explanations supporting the Petition's proposed obviousness combinations and motivations to combine. EX1003, ¶¶32-89. Dr. Traynor's robust testimony is confirmed and corroborated by more than two dozen third-party references. *See generally* EX1003, ¶15; EX1004-EX1024, EX1026-EX1033.

In short, the Petition advances strong and meritorious grounds that are supported by Dr. Traynor's focused and corroborated expert testimony. This factor favors institution.

5. *Settled expectations of the parties, such as the length of time the claims have been in force*

Samsung's settled expectations far outweigh Headwater's in this case. The '510 Patent issued approximately eight years ago but Headwater submitted no evidence that the claimed technology was ever previously "commercialized, asserted, marked, licensed, or otherwise applied in a petitioner's particular technology space." *Intel Corp. v. Proxense LLC*, IPR2025-00327, Paper 12, pp. 2-3. This is unsurprising as Headwater is a patent assertion entity that does not produce any real products. Indeed, the '510 Patent is but one of twenty-one different patents that Headwater has asserted against Samsung across multiple litigations in recent years. This fact alone counsels against discretionary denial. *Id.*

Moreover, Headwater has only recently become litigious. Its first patent lawsuit was not brought until October 2022—years after the '510 Patent issued in 2017. *See* EX1168; EX1169. It has since filed some 39 district court complaints against defendants across the industry including not just Samsung but also Verizon Wireless, T-Mobile, AT&T, Amazon, Google, Sprint, and Motorola. *See* EX1169. The parallel litigation at issue here is the first and currently only suit involving the '510 Patent. Samsung could not have been expected to challenge the '510 Patent even earlier under these circumstances.

Further, Headwater provided no notice to Samsung about the '510 Patent before it launched its litigation action in the Eastern District of Texas in April 2024. There was no reason to expect that Headwater would assert the '510 Patent at that time given that a year and a half had already passed since Headwater had initiated its suit against Samsung in October 2022. But even if *arguendo* Samsung had been made aware of the '510 Patent at an earlier time, Samsung would have had no reasonable basis to perceive the patent as a threat to its products—and certainly not a threat meriting the substantial expense and resources needed to prepare and file an earlier IPR or PGR. This is because multiple claims of the '510 Patent—including independent claims 1 and 47—prominently recite limitations directed to a “target credential,” even though the term “target credential” is never once mentioned in the

background, the drawings, the brief description of the drawings, or the detailed description of the '510 Patent.<sup>11</sup> *See generally* EX1001. For example, limitation [1d] refers to a “target credential” stored in memory of the wireless device, limitation [1f] refers to “a user request to replace a particular credential ... with the target credential,” and limitation [1h] requires that the processor(s) “determine that the particular credential does not match the target credential.” Pet., vi; EX1001, 20:15-41. Independent claim 47 similarly includes multiple limitations involving a “target credential.” Pet., xii-xiii; EX1001, 24:20-39.

Despite the purported significance of a “target credential” to the techniques claimed in the '510 Patent, Headwater provided no notice to the public of what a “target credential” actually is. Headwater instead chose to claim using terms that find no support in the specification while also providing no clear boundaries between what constitutes a “credential,” a “particular credential,” an “updated credential,” or a “target credential”—all terms used in independent claims 1 and 47. Samsung and

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<sup>11</sup> Outside of the claims, the only mention of a “target credential” in the entire specification of the '510 Patent is in the Abstract. But the Abstract largely mirrors the claims and offers no further insight to the scope or meaning of “target credential” than the claims. *See* EX1001, Abstract.

the public could only speculate how Headwater might view these differences or interpret the term “target credential.”

Given the absence of any specific guidance as to the scope of “target credential” in the specification of the ’510 Patent, Samsung could not reasonably have expected the claims of the ’510 Patent to be relevant to Samsung products. For example, Headwater has taken liberty in interpreting the claims to accuse infringement based on Samsung’s use of eSim technology in products such as Samsung Galaxy phones and tablets. EX1100, EX1171. But Samsung did not even begin incorporating eSim into its phones until 2019-2020—years after issuance of the ’510 Patent. EX1175. Samsung would have had little reason to challenge the patent in these early years before the accused functionality was part of its phones, for example. Headwater also had not previously enforced its patents until October 2022, but even so, and even after Samsung began incorporating eSim technology in 2020, Headwater’s confusing claim strategy—including its choice to use one set of terms in the specification and another in the claims—deprived Samsung and the public of any reasonable basis to understand how the claims would possibly be relevant to eSim technology or the accused products. Headwater should not be rewarded for such tactics.

Against this background, it is also notable that Headwater also offers no explanation why it could not have brought its lawsuit against Samsung years sooner (when the patent would have been even younger), especially as Headwater was in

the best position—not Samsung—to understand how it might interpret terms like “target credential” that are never described in the ’510 Patent. The fact that Headwater did not bring its suit earlier would only reinforce settled expectations that the ’510 Patent was not relevant to Samsung’s products.

If anything, Headwater intentionally delayed asserting the ’510 Patent to maximize litigation pressure on Samsung. Indeed, *three separate actions* were filed and *20 separate patents* asserted by Headwater against Samsung before the ’510 Patent was ultimately asserted—each action an opportunity to assert the ’510 Patent. EX1158, EX1169, EX1168, EX1172, EX1173. Despite multiple opportunities, Headwater inexplicably waited to assert the ’510 Patent, timing the suit to maximize litigation costs and pressure on Samsung. This reeks of gamesmanship—tactics that should not be rewarded with discretionary denial at the PTAB.

The PTAB’s very “purpose and design,” as reiterated by the Supreme Court, is fulfilled by addressing the merits of the prior art here, not by shunning this much-needed review before it starts. *Thryv, Inc. v. Click-To-Call Techs., LP*, 590 U.S. 45, 54 (2020) (“By providing for *inter partes* review, Congress, concerned about over-patenting and its diminishment of competition, sought to weed out bad patent claims efficiently”); *Cuozzo Speed Techs., LLC v. Lee*, 579 U.S. 261, 279-80 (2016) (describing the PTAB’s basic “purpose” and the public’s “paramount interest in seeing

that patent monopolies ... are kept within their legitimate scope”). Headwater’s attempt to evade review based solely on the (still relatively young) age of the patent should not be condoned, especially where this age is the result of Headwater’s own actions in (i) obfuscating the claimed subject matter through claim terms never described in the specification and (ii) delaying assertion of the ’510 Patent for years after issuance (and even delaying for a year and a half after Headwater filed its first suit against Samsung in October 2022) while the public was still deprived of any clear basis for understanding key claim terms such as “target credential,” and (iii) delaying the asserting of the ’510 Patent as part of a litigation strategy. Moreover, as was the case in *Tesla*, the “complex and diverse litigation” between the parties— involving Headwater’s assertion of 21 patents against Samsung over the last 2.5 years and Samsung’s 11 pending IPRs—further “tip[s] the balance against discretionary denial” even if the age of the patent (8 years) were a concern. *See Tesla*, IPR2025-00219, -00222, 00339, Paper 9 (PTAB June 13, 2025) (denying requests for discretionary denial based on patents aged 8, 9, and 14 years, respectively); *supra*, §II.A.

6. *Compelling economic, public health, or national security interests*

Samsung is responsible for substantial and sustained investments and economic activity in the United States. For example, Samsung’s investment in the US

totals **\$47 billion** since 1978 (EX1154), and Samsung proposes **\$191 billion** in further investment, largely in Texas. EX1155. Further, “[s]ince 1996, Samsung Semiconductor has invested **\$18 billion** in operating two fabs at its Austin, Texas, campus—making it **one of the largest direct foreign investments in United States history**.” EX1156 (emphasis added). Additionally, Samsung’s investment is ongoing, with “President Trump Say[ing] Samsung Is Planning a ‘Massive Investment’ In The US.” EX1157. Thus, Samsung’s massive and ongoing investment presents a compelling economic interest, and Samsung’s investment (e.g., in US-made semiconductors) supports the US’s national security interests.

Such considerations weigh heavily against discretionary denial and Samsung respectfully requests an opportunity for the strong grounds presented in its Petitions on the ’510 Patent to be considered at the PTAB. In this regard, Samsung seeks efficient resolution at the PTAB of the patentability of the challenged claims of yet another patent asserted against it by a highly-litigious and non-practicing entity that is actively pursuing multi-patent litigation campaigns against Samsung, and other entities. EX1158, 2-4 (over 5 different suits, Headwater has asserted 21 patents against Samsung); EX1158, 1-7 (Headwater has sued multiple other entities, including Verizon, T-Mobile, Google, and AT&T, over claims of infringement of over 70 patents).

### III. CONCLUSION

For the foregoing reasons, a holistic evaluation of the complex and diverse litigation between the parties, the *Fintiv* factors and the additional considerations laid out in the Stewart Memorandum strongly weigh against discretionary denial. Petitioner therefore respectfully requests that this case proceed to an institution determination on the merits.

Respectfully submitted,

Dated 07/16/2025

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**CERTIFICATION UNDER 37 CFR §42.24**

Under the provisions of 37 CFR § 42.24(d), the undersigned hereby certifies that the word count for the foregoing Petitioner's Opposition to Patent Owner's Discretionary Denial Brief totals 9,051 words, which is less than the 14,000 words allowed under 37 CFR § 42.24.

Respectfully submitted,

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**CERTIFICATE OF SERVICE**

Pursuant to 37 CFR §§ 42.6(e)(4) and 42.205(b), the undersigned certifies that on July 16, 2025, a complete and entire copy of this Petitioner's Opposition to Patent Owner's Request for Discretionary Denial of Institution and Accompanying Exhibits were provided by email to the Patent Owner by serving the correspondence email address of record as follows:

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