IN THE 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., and

SAMSUNG ELECTRONICS AMERICA, INC.,

Petitioners,

v.

XIFI NETWORKS R&D, INC.,

Patent Owner.

_____

Case No. IPR2025-01270

U.S. Patent No. 12,114,177

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

TABLE OF CONTENTS

Page

I. INTRODUCTION 1
II. SETTLED EXPECTATIONS WEIGH AGAINST DENIAL 2
III. INSTITUTION WOULD EFFICIENTLY USE BOARD RESOURCES 3
IV. THE EXAMINER ERRED IN ALLOWING THE '177 PATENT 4
V. ON BALANCE, THE *FINTIV* FACTORS WEIGH AGAINST DISCRETIONARY DENIAL 6
A. Factor 4: Petitioners' Stipulation Weighs Heavily Against Denial 6
B. Factor 1: The District Court's Likelihood to Grant a Stay If the IPR Is Instituted Is Neutral 9
C. Factor 2: The Proximity of the District Court Trial and The Board's Final Written Decision Is Neutral 10
D. Factor 3: The Parties' Limited Investment in the District Court Litigation Weighs Against Discretionary Denial 12
E. Factor 5: Petitioners Being the District Court Defendants Does Not Outweigh the Factors Weighing Against Discretionary Denial 13
VI. THE MERITS OF THE PETITION ARE STRONG 13
A. Patent Owner's "Gap-Filling" Criticisms 15
B. The Chincholi/Clegg Combination Is Motivated by the References and Predictable to Implement 17
C. The Petition's Implementation Analysis Is Grounded in References 19
VII. CONCLUSION 20

TABLE OF EXHIBITS

Exhibit	Description
1001-1017	*Previously presented.*
1018-1019	[Intentionally Omitted]
1020	Patent Owner's March 26, 2025 P.R. 3-1 Infringement Contentions
1021-1022	[Intentionally Omitted]
1023	Eastern District of Texas Calendar Events Set for October 19, 2026 (Oct. 9, 2025, 4:50 PM)
1024	Excerpt of Federal Court Management Statistics (June 30, 2025), https://www.uscourts.gov/sites/default/files/document/fcms_na_distprofile0630.2025.pdf

I. INTRODUCTION

The Director should deny Patent Owner's request for discretionary denial (Paper 8) ("DD Request"). The challenged patent is one of eleven closely related patents that Patent Owner only recently obtained on a previously dormant patent family and then abruptly asserted against a long-standing industry participant. Petitioners have challenged all eleven patents, three by PGR.

The recently issued patents each lack the settled expectations that the Director has repeatedly emphasized. For example, the '177 patent was not filed until March 13, 2024, and it issued about one year ago, on October 8, 2024. Board review would be highly efficient given the interconnected and highly technical nature of the proceedings: the eleven patents have a common ancestor and share the same specification, and the claims have a high degree of overlap.

Institution is also warranted because of the lack of rigorous examination across the patent family. Nearly all of the patents issued through Track One prioritized examination with minimal substantive review, creating a pattern of expedited allowances without thorough prior art consideration.

District Court timing also militates against discretionary denial. The (tentative) trial date is a year away and remains subject to change. In fact, applying the median time to trial statistics for the Eastern District of Texas, trial is not expected until late January 2027, ***after*** the Board's latest statutory deadline of January 20, 2027. These

petitions were also filed at the beginning of the litigation, before any substantive discovery or claim construction proceedings took place. The parties are in the early stages of discovery, and any claim construction hearing is more than six months away.

Petitioners' unusually broad stipulation mitigates the risk of duplication across forums by extending beyond standard *Sotera* terms: Petitioners stipulate that they will not pursue in district court any combinations that include Chincholi or Clegg—even combinations with references that could never be raised in an IPR.

Finally, the merits of Petitioners' substantive arguments are strong, further supporting denying Patent Owner's request.

II. SETTLED EXPECTATIONS WEIGH AGAINST DENIAL

The '177 patent is in the same family as U.S. Pat. Nos. 11,818,591 ("'591 patent"), 11,849,337 ("'337 patent"), 11,856,414 ("'414 patent"), 11,974,143 ("'143 patent"), 11,950,105 ("'105 patent"), 12,003,976 ("'976 patent"), 12,015,933 ("'933 patent"), 12,169,756 ("'756 patent"), 12,190,198 ("'198 patent"), and 12,250,564 ("'564 patent") (collectively, the "Challenged Patents."). Each Challenged Patent issued only within the past two years. Thus, each lacks settled expectations. *Cambridge Indus. USA, Inc. v. Applied Optoelectronics, Inc.*, IPR2025-00433, Paper 11 at 2 (Director June 27, 2025).

Patent Owner's DD Request does not even address settled expectations. That

silence is all the more telling, because Patent Owner "does not contend that any XiFi apparatus, device, process, method, act, or other instrumentality practices any of the asserted claims." EX1020 at 6. The Director has previously found that lack of previous application of challenged claims "in [Petitioners'] particular technology space" contributes to a lack of settled expectations as to the validity of this claims. *See Shenzen Tuozhu Tech. Co., Ltd. v. Stratasys, Inc.*, IPR2025-00438, Paper 10 at 3 (Director July 17, 2025). Indeed, the Challenged Patents were never asserted in any lawsuit until this one, and Patent Owner has not filed any other suits since. There are no "settled expectations" that would inure to Patent Owner's benefit.

Patent Owner's lack of settled expectations is further demonstrated by the recency of its enforcement. Patent Owner alleges that the Challenged Patents enable Wi-Fi 7 features. EX2001, ¶ 2. Samsung released its first Wi-Fi 7 products in 2024, and Patent Owner filed suit in December 2024—less than a year later. This rapid assertion against newly released products confirms the absence of any settled expectations regarding validity of the challenged claims.

III. INSTITUTION WOULD EFFICIENTLY USE BOARD RESOURCES

Referring all eleven petitions to the Board would be an efficient use of Board resources, which further weighs against discretionary denial. *Embody, Inc. v. LifeNet Health*, IPR2025-00248, Paper 13 at 3 (Director June 26, 2025). There is significant overlap among the petitions. Chincholi appears in all eleven petitions, providing the

fundamental teachings for the obviousness grounds. Riggert appears in seven of the eight IPR petitions, and Clegg appears in seven petitions spanning both IPRs and PGRs. The consistent use of these core references makes analysis of one petition highly informative for the others.

Further, Patent Owner alleges the Challenged Patents cover "foundational" technologies and enable Wi-Fi 7 features that are standardized across the industry. EX2001, ¶ 2. Board review would provide clarity for numerous implementers, making institution a highly efficient use of Board resources.

IV. THE EXAMINER ERRED IN ALLOWING THE '177 PATENT

Most of the Challenged Patents (including the '177 patent) issued through Track One prioritized examination with no substantive office actions, creating conditions ripe for error. EX1004, Apr. 18, 2024 Decision Granting Track One Request. This is particularly concerning given the technical complexity of the claimed wireless communications technology and the crowded field. Indeed, the Examiner overlooked or failed to raise relevant prior art, including Chincholi and Clegg, which Petitioners now demonstrate render all claims obvious. Pet., Ground 1.

The Examiner's errors during prosecution of the '177 patent may stem, in part, from moving too fast. The '177 patent was not filed until the Examiner had issued an NOA to the '591 patent. Yet the Examiner issued no office action whatsoever.

Instead, Applicant filed terminal disclaimers on March 13, 2024, and the Examiner issued an NOA on May 15, 2024. EX1004, Mar. 13, 2024 Terminal Disclaimers; May 15, 2024 NOA. The '177 patent sailed through prosecution with zero substantive examination, creating conditions ripe for the errors Petitioners now demonstrate.

Applicant's disclosure practices illustrate the prosecution errors plaguing this patent family. For example, Applicant disclosed Clegg on October 11, 2024 in IDSs for both the '198, '756, and '564 patents. Yet the '177 patent and three other related patents (that are now being challenged as obvious over Clegg) had already issued without Applicant disclosing or the Examiner considering the reference. Petitioners now demonstrates that the '177 patent and six other related patents are obvious over Clegg. Similarly, Applicant disclosed a related Chincholi reference (U.S. Pat. Pub. No. 2013/0201847) in an IDS during the '177 patent's prosecution (EX1004, Mar. 13, 2024 IDS), but the Examiner never discussed it or used it as the basis for any rejection. *Ecto World, LLC v. RAI Strategic Holdings, Inc.*, IPR2024-01280, Paper 13 at 5-6 (Director May 19, 2025) (precedential) (Examiner materially errs when failing to consider prior art teachings material to patentability).

Even if the Director finds that other factors may favor discretionary denial, "it is an appropriate use of Office resources to review the[se] potential error[s]." *Taiwan Semiconductor Mfg. Co. v. Marlin Semiconductor Ltd.*, IPR2025-00847 *et al*, Paper

11 (Director Sept. 3, 2025) (referral when the ITC hearing on the challenged patent is scheduled nine months before the projected final written decision due date). This remains true even if the Director finds the Examiner's errors are applicable to only some Challenged Patents, since instituting proceedings on the other patents will be an "efficient use of Board resources." *Embody*, IPR2025-00248, Paper 13 at 3.

V. ON BALANCE, THE *FINTIV* FACTORS WEIGH AGAINST DISCRETIONARY DENIAL

A proper analysis of the *Fintiv* factors supports denying the DD Request. Most notably, Petitioners have filed a broad stipulation that goes beyond addressing the Director's concerns with *Sotera* stipulations. Paper 7; *Motorola Sols. v. Stellar, LLC*, IPR2024-01205, Paper 19 at 3-4 (Director Mar. 28, 2025).

A. Factor 4: Petitioners' Stipulation Weighs Heavily Against Denial

Petitioners' stipulation, which Petitioners' research indicates is one of the broadest that an IPR petitioner has provided, outweighs every other *Fintiv* factor. Petitioners stipulate that, if this petition is instituted, they will not assert in the litigation invalidity grounds that include:

> 1. "any grounds of invalidity arising under U.S.C. § 102 or § 103 involving only patent or printed publication prior art that could have reasonably been raised before the Board with respect to [the '177 patent], including the same grounds in the Petition (Paper 1);" or
>
> 2. "any grounds of invalidity arising under U.S.C. § 102 or § 103 with respect to the '177 patent that include [Chincholi or Clegg]."

Paper 7.

The two components together eliminate potential overlap between this PTAB proceeding and the District Court litigation. Clause 1 is a standard *Sotera* stipulation. Clause 2 goes significantly further. It removes the primary IPR references (Chincholi and Clegg) from ***any*** District Court invalidity grounds, ***including combinations with system art***. By removing these from all potential district court §§ 102 or 103 grounds—including combinations with system art—Clause 2 effectively eliminates the possibility of duplicative or conflicting adjudication.

Patent Owner argues that Clause 1 leaves open the possibility that in district court Petitioners might assert combinations of *other* patents or printed publications with system art. DD Request, 11. But Petitioners' stipulation mitigates this risk far more than a typical *Sotera* stipulation. Moreover, Patent Owner points to no law, rule, or decision that supports its position that discretionary denial is warranted on the mere basis that Petitioners may assert in district court system art references in combination with patents or printed publications that are ***not*** asserted in the IPR.

Patent Owner's citation to *Motorola*, IPR2024-01205, Paper 19, is inapposite. There, the Director expressly noted that petitioner's stipulation did not foreclose combinations of system art with the IPR references. *Id.* at 4. Here, Clause 2 directly addresses this concern. Further, *Motorola* does not hold that a stipulation is inadequate unless it forecloses all possible system art combinations. Rather, *Motorola* addressed the ***overall*** weighing of *Fintiv* factors: the Director

acknowledged that a standard stipulation "may mitigate some concern of duplication," *id.* at 4, but concluded that the mitigation there did not outweigh other case-specific facts, including substantial investment in the district court proceeding and factors 1, 2, and 5. *Id.* at 4.

Patent Owner next argues that Petitioners' stipulation does not make IPR a "true alternative" because Petitioners could use Chincholi or Clegg as "evidence" of other grounds. DD Request at 11-13. This argument misstates the law. *Sotera Wireless, Inc. v. Masimo Corp.*, IPR2020-01019, Paper 12 at 19 (P.T.A.B. Dec. 1, 2020) (stipulation makes IPR "true alternative" by "address[ing] concerns of duplicative efforts and potentially conflicting decisions in a much more substantial way"). Of course, § 101 and § 112 challenges cannot by statute be raised in an IPR. *See* 35 U.S.C. § 311(b). There is thus no risk of parallel adjudication.

Contrary to Patent Owner's argument, the possibility that Petitioners may use Chincholi or Clegg as background evidence—to show state of the art or level of ordinary skill—in parallel district court litigation is fundamentally different from asserting their teachings as a basis for invalidity. Only the latter creates duplicative adjudication. Patent Owner also argues there is overlap because Clegg issued to Netgear and Samsung cites a Netgear router as system prior art, but Patent Owner fails to identify any specific overlap between Clegg's teachings and the Netgear router that would create duplicative efforts. DD Request at 12-13. And Patent Owner

cites no case requiring petitioners to stipulate away non-IPR-eligible theories or every evidentiary use of references.

Accordingly, Factor 4 factor heavily weighs against denial.

B. Factor 1: The District Court's Likelihood to Grant a Stay If the IPR Is Instituted Is Neutral

Patent Owner attempts to predict how the District Court might rule on a potential post-institution stay motion. DD Request, 8-9. But the Board declines to engage in such speculation when the district court has not expressed any position on the matter, instead treating this factor as neutral. *Apple, Inc. v. Fintiv, Inc.*, IPR2020-00019, Paper 15 at 12 (P.T.A.B. May 13, 2020) (declining to "infer, based on actions taken in different cases with different facts, how the District Court would rule").

Patent Owner concedes that the District Court would likely consider and potentially approve a stay if institution occurs across all eleven petitions. DD Request, 9 n.3; *see also Emerging Automotive LLC v. Kia Corp.*, No. 2:23-cv-00437-JRG, Dkt. 301 (E.D. Tex. Jun. 30, 2025) (granting stay following institution of IPRs and *ex parte* reexamination against all asserted patents). Indeed, the District Court has shown a recent willingness to grant stays even close to trial. *Id.* (approving stay three weeks pre-trial); *Stellar LLC v. Motorola Sol., Inc.*, No. 4:23-cv-750-SDJ, Dkt. 156 (E.D. Tex. Feb. 24, 2025) (imposing stay two weeks before trial, even while awaiting institution decisions on some asserted patents).

A stay in this case may be particularly attractive to the District Court given the high degree of overlap in prior art theories across the eleven petitions, and the fact that Petitioners are asserting PGRs which offer the possibility for guidance on the common § 101 and § 112 issues existing in this patent family.

C. Factor 2: The Proximity of the District Court Trial and The Board's Final Written Decision Is Neutral

While Patent Owner emphasizes the scheduled October 19, 2026 trial date, this date is not guaranteed given Judge Gilstrap's busy trial docket (there are ***six*** trials (four of them patent) and one pretrial conference currently scheduled for that same day). EX1023. Additionally, the Eastern District of Texas's actual time-to-trial statistics show that the most recent median time-to-trial for the district court is 25.1 months. EX1024. Applying those statistics would place trial at around late January 2027, after the Board's latest statutory deadline of January 20, 2027.

Even if the scheduled trial date is accepted, the Director has referred petitions to the Board despite comparable timing concerns, particularly where other factors—like lack of settled expectations—weigh against denial. *See Zhuhai CosMX Battery Co. v. Ningde Amperex Tech. Ltd.*, IPR2025-00385, Paper 9 at 2-3 (P.T.A.B. July 2, 2025) (lack of settled expectations justified referral to the Board despite trial scheduled to occur before FWD).

And the cases Patent Owner cites are distinguishable. In *Cisco Sys. Inc. v.*

WSOU Invs. LLC, IPR2025-00429, Paper 15 (P.T.A.B. June 25, 2025), the projected final written decision was July 30, 2026, but the district court's scheduled trial date was April 20, 2026 (resulting in a gap 50% larger than here). *Id.* at 2. In *Full-Metal-Power B.V. v. Infocus Downhole Sols. USA LLC*, IPR2025-00391, Paper 14 (P.T.A.B. June 25, 2025), the Board denied institution where the jury trial was scheduled to begin a month before the projected due date of the final written decision, but this was just one factor in a "holistic assessment" of a situation markedly different from the one at issue here: for example, there, petitioner failed to offer <u>*any*</u> prior art stipulation. *Id.* at 2.

Patent Owner accuses Petitioners of "delay" in filing its petitions. DD Request, 7-8. To the contrary, Petitioners acted with diligence. Two of the eleven challenged patents—the '198 patent (challenged in PGR2025-00067) and the '564 patent (challenged in PGR2025-00069)—did not even issue until January 7, 2025 and March 11, 2025, respectively. Patent Owner added them on March 11, 2025 in an Amended Complaint. EX2003. Petitioners then had to assess the newly added patents. That Petitioners filed eleven petitions challenging over 300 technically complex claims only about three to four months after the Amended Complaint is evidence of diligence, not lack of diligence. The timeline reflects appropriate care in identifying the strongest prior art references and developing comprehensive positions across the family. *Tianma Microelectronics Co. Ltd. v. Japan Display Inc.*,

IPR2021-01057, Paper 15 at 9-11 (P.T.A.B. Jan. 6, 2022) (finding diligence in filing petition nine months after complaint and six months after infringement contentions).

D. Factor 3: The Parties' Limited Investment in the District Court Litigation Weighs Against Discretionary Denial

This factor weighs against discretionary denial. At the time of the Board's institution decision, the District Court case will still be in its early stages with limited investment by the Court and parties.

While Patent Owner emphasizes that the parties have exchanged contentions (DD Request, 7), the litigation is in its infancy. Trial is not scheduled until October 19, 2026, at the earliest. Fact discovery is only recently underway and will not close until May 2026. Expert discovery will not close until late June 2026 (and Patent Owner will not need to serve an expert response to Petitioners' invalidity contentions until after the institution decision date, meaning Patent Owner will then benefit from Petitioners' broad stipulation). Claim construction proceedings have not even begun, the claim construction hearing is more than six months away (more than three months ***after*** the institution decision date), and dispositive motions are not due another two months after that. EX2002 at 4; *see Apple Inc. v. Fintiv, Inc.*, IPR2020-00019, Paper 11 at 10 (P.T.A.B. Mar. 20, 2020) ("If, at the time of the institution decision, the district court has not issued orders related to the patent at issue in the petition, this fact weighs against exercising discretion to deny institution . . . .");

Coretronic Corp. v. Maxell Ltd., IPR2025-00941, Paper 9 (Sept. 26, 2025) (finding meaningful investment where "the parties have participated in a *Markman* hearing, fact discovery was scheduled to close on August 21, 2025, and expert discovery will close soon."). This schedule weighs heavily against discretionary denial.

Patent Owner claims Petitioners chose to "actively" litigate by filing an Answer/Affirmative Defenses and Invalidity Contentions. DD Request, 2. This is meritless. Petitioners complied with deadlines for mandatory filings. Pre-institution stays are exceedingly rare in this District Court, and the standard practice is to seek a stay only after institution. *See, e.g.*, *Advanced Integrated Circ. Process LLC v. Taiwan Semiconductor Mfg. Co.*, 2-25-cv-00324-JRG, Dkt. 71 at 2 (E.D. Tex. Aug. 29, 2025) ("withhold[ing] a [stay] ruling pending action on the petition by the PTAB"). Petitioners have not made the substantive investment *Fintiv* contemplates. They have not litigated claim construction or even any discovery disputes, and the court has issued no substantive orders on the patents.

In sum, neither party has made substantial investment in the District Court.

E. Factor 5: Petitioners Being the District Court Defendants Does Not Outweigh the Factors Weighing Against Discretionary Denial

The Petitioners here are the defendants in the District Court case. This factor does not outweigh the other factors discussed above.

VI. THE MERITS OF THE PETITION ARE STRONG

Patent Owner does not dispute the merits of the Petition—not even in its *Fintiv* Factor 6 analysis. DD Request (Section III.E). Patent Owner's DD Request instead focuses on procedural criticisms about expert testimony and alleged "gap-filling." This silence on the substantive merits weighs heavily in favor of institution.

The Petition's merits are strong. The Petitions use specific, pinpoint citations to show that the prior art references—Chincholi and Clegg—disclose every disputed element and explain that the combination rationale flows directly from the references' overlapping objectives (increasing throughput and efficiency in multi-transceiver wireless networks) and from Chincholi's existing architecture, which a POSITA would naturally be motivated to incorporate Clegg's techniques for mitigating interference within a given channel.

Patent Owner's contrary characterization misstates how expert testimony properly functions under Board rules. Patent Owner argues that the Petition seeks to "fill gaps" with expert testimony, suggests over-reliance, labels portions "conclusory," and complains that the expert references background materials not listed as prior-art grounds. That framing misstates the record and the misapplies the rules. The Petition uses the expert to articulate why a POSITA would read the references the way the Petition does and why a POSITA would combine them. *See, e.g.*, EX1002, ¶¶ 69-182.

But the substantive question is not, *e.g.*, the degree of textual overlap between

a declaration and a petition, but is whether Chincholi and Clegg teach what the Petition says they teach. The Petition and the declaration both cite to the same specific disclosures in Chincholi and Clegg, and thus exhibit textual overlap. Nor does textual coordination between legal argument and expert analysis establish that there is anything improper about the Petition or the expert declaration. Here, the Petition makes proper use of expert testimony and does not rely on the expert to supply missing elements. 37 C.F.R. § 42.65(a); *Xerox Corp. v. Bytemark, Inc.*, IPR2022-00624, Paper 9 (Aug. 24, 2022) (precedential).

A. Patent Owner's "Gap-Filling" Criticisms

Patent Owner identifies two alleged "gap-filling" examples. Patent Owner claims Chincholi does not discloses a "virtual MAC interface" because it does not use the word "virtual." DD Request, 15. Patent Owner also claims Chincholi lacks disclosure that one device's use of bandwidth "does not prevent" other devices' access, and that Dr. Almeroth supplies a detailed OFDMA explanation not otherwise in Chincholi to "find evidence" of this element. *Id.* at 16. Both criticisms fail because Chincholi expressly discloses both claimed functions, albeit not using the precise words chosen by Patent Owner. Dr. Almeroth merely explains why a POSITA would recognize those disclosures as teaching the challenged limitations.

Virtual MAC Interface. Chincholi discloses the architecture and functionality the claims recite as a "virtual MAC interface." As discussed in the Petition,

Chincholi discloses an "Opportunistic Multiple-Medium Access Control (MAC) Aggregation (OMMA) layer," a "single thin software layer" positioned above multiple actual MAC/PHY stacks that "distributes and/or combines" packets between the IP layer and the underlying transceivers. Pet., 13, 25; EX1005 at [0003], [0120], [0192]. Chincholi also discloses the specific functional components the '177 patent associates with the "virtual MAC interface": an IP QoS Scheduler, a MAC Resource Reservation Module, and a Traffic Shaping Module. Pet., 25-27; EX1005 at [0139], [0142]-[0143].

Dr. Almeroth explains why a POSITA would understand these components as corresponding to the claimed virtualization function. EX1002, ¶¶ 97-99. That is proper expert testimony—explaining why disclosed functionality meets claimed functionality—not gap-filling. The absence of the word "virtual" is immaterial when the reference discloses the underlying function.

"Does Not Prevent" Other Devices' Access. Patent Owner asserts that "Chincholi does not expressly disclose" the limitation requiring that one device's bandwidth use does not prevent other devices from using remaining bandwidth portions, and argues that Dr. Almeroth improperly fills this gap with OFDMA. DD Request, 16. Patent Owner is wrong.

First, Chincholi expressly discloses multi-device concurrent access. Chincholi discloses that "[a] system may comprise multiple WTRUs, a single NT, and multiple

IP flows from the NT to one or more WTRUs"—meaning multiple wireless devices receiving data at the same time. EX1005 at [0328]. Chincholi then explains how the system manages this: it uses separate queues for each device and schedules transmissions across multiple transceivers to accommodate all devices. *Id.* at [0351]-[0356]. These are Chincholi's own disclosures, not expert characterization.

As for OFDMA, Chincholi expressly discloses that "Table 2 provides examples of feedback metrics that may be used by an OMMA layer." *Id.* at [0161]. Then in Table 2, Chincholi expressly lists "OFDMA" as a "MAC Type" feedback matric. *Id.* OFDMA is a well-known technology in wireless communications. When Dr. Almeroth explains what OFDMA refers to, dividing bandwidth into subcarriers for simultaneous multi-user access (*Id.* ¶ 132), he is not improperly supplying information "not otherwise disclosed in Chincholi." He is unpacking the jargon used in Chincholi. Patent Owner would prohibit expert explanations of a reference's technical terminology, but that is quintessentially proper expert testimony.

B. The Chincholi/Clegg Combination Is Motivated by the References and Predictable to Implement

Patent Owner contends there is no proper motivation to combine Chincholi and Clegg, arguing that background materials (*e.g.*, the IEEE 802.11 standard, U.S. Pat. Appl. No. 2009/0141691 ("Jain"), and U.S. Pat. No. 9,379,868 ("Wang")) improperly supply the "processing interface comprising multiple resource

monitoring interfaces" and "disassociation" ideas. DD Request, 16-19.

This criticism fails because both the motivation and the ideas come directly from the references. Patent Owner claims that the expert "*implicitly* admits that Chincholi's OMMA does not expressly disclose the claimed 'processing interface comprising multiple resource monitoring interfaces.'" DD Request, 17 (emphasis added). But he made no such admission, implicit or not. Chincholi discloses a "OMMA Controller," which comprises "a Feedback Device Classifier module 2930." EX1005 at [0205]. And the expert explained that the Feedback Device Classifier module 2930 "is a 'resource monitoring interface' for collecting and analyzing this feedback information." EX1002 at ¶ 146. The expert then explained why "a POSITA would have been motivated to implement virtualized physical interfaces, each capable of collecting and consolidating feedback metrics for its respective group of similarly configured RATs." *Id.* ¶ 147. The background material (*i.e.*, IEEE 802.11 standard and Jain) simply contextualizes why such an implementation would be "particularly advantageous." *Id.*

Patent Owner's "disassociation" criticism likewise fails. As explained by the expert, Clegg does not require disassociation during operation. EX1002, ¶ 117. "Clegg teaches that an 802.11 network terminal can use a first wireless transceiver to transmit a data stream using only the subset of frequencies that are not unavailable for communication, without requiring disassociation of the recipient from the access

point." *Id.* After evaluating the interference levels of each carrier across the available spectrum, Clegg teaches the capability to "notch out" specific OFDM subcarriers that experience an unduly high level of interference. *Id.* ¶ 118 (citing EX1009 at 7:15-19). The remaining carriers, *i.e.*, those suitable for communication, are then selected to form a "cluster of carriers for communication." *Id.* (citing EX1009 at 4:9-10. This cluster may include contiguous discontinuous carriers in a single or more than one sub-channel. *Id.* (citing EX1009 at 4:11-15). Again, the background material (*i.e.*, Wang) merely provides the context of why a POSITA would have recognized that Clegg's selection of a cluster of carriers enables the transmission of the first data stream using only the subset of frequencies—or given resources—within the first identified bandwidth portion that are not unavailable. *Id.*

C. The Petition's Implementation Analysis Is Grounded in References

Patent Owner criticizes Dr. Almeroth for providing "little discussion as to how a POSITA would implement the elements missing from Chincholi into that architecture" and for using "conclusory statements" like "straightforward" or "without technical difficulty." DD Request, 19. As explained in Section VI.B above, there are no missing elements—both the motivation and implementation details come directly from the references.

Further, the expert explained that Chincholi already teaches the dynamic allocation of contiguous and non-contiguous channels, and Clegg supplements this

by providing additional techniques for mitigating interference within a given channel. EX1002, ¶ 72. And because the teachings of Clegg are "complementary to those of Chincholi," integrating Clegg's techniques into the Chincholi system could be achieved "without technical difficulty." *Id.*

Patent Owner also mischaracterizes the expert's use of the word "straightforward." The expert explained that Chincholi already discloses the simultaneous transmit-and-receive functionality, citing to the reference itself, including its disclosure of a bidirectional data flow between the actual MAC layer and the OMMA layer via links "A1" and "A2" and support of both "Incoming" and "Outgoing" MAC service data units. *Id.* ¶¶ 125-126 (citing EX1005 at Fig. 5, [0138]). The expert then explained, ***"[t]o the extent such functionality is not explicitly disclosed by Chincholi***," implementing simultaneous transmit-and-receive capability within Chincholi's architecture would be "straightforward" in light of background reference's (DiFazio's) teachings. *Id.* ¶ 128 (emphasis added).

Thus, the expert's characterizations are not mere conclusions but reasoned assessments grounded in the complementary teachings of the references themselves and the straightforward nature of their combination.

VII. CONCLUSION

Patent Owner has identified no legitimate basis for the Director to deny institution based on any discretionary factors. Institution should be granted.

DATED: October 20, 2025

Respectfully submitted,

By */s/ James Glass*

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CERTIFICATE OF SERVICE

Pursuant to 37 C.F.R. § 42.6, I hereby certify that on October 20, 2025 the foregoing document was served via email on the following counsel of record:

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