UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

SAMSUNG ELECTRONICS CO., LTD.,
Petitioner,

v.

WILUS INSTITUTE OF STANDARDS AND TECHNOLOGY INC.,

Patent Owner

IPR2025-01043
U.S. Patent No. 11,116,035

PATENT OWNER'S RESPONSE

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PATENT OWNER'S EXHIBIT LIST

Exhibit	Description
2001	Order, *Wilus Institute of Standards and Technology Inc., v. HP Inc.*, Case No. 2:24-cv-00752-JRG, Dkt. No. 130 (E.D. Tex., July 11, 2015) (Lead Case) ("Docket Control Order")
2002	INTENTIONALLY LEFT BLANK
2003	Defendants' P.R. 3-3 and 3-4 Invalidity Contentions and Subject Matter Eligibility Contentions in the consolidated case, *Wilus Institute of Standards and Technology Inc., v. HP Inc.*, Case No. 2:24-cv-00752-JRG (E.D. Tex.), dated February 13, 2025.
2004	Docket Navigator Stay Statistics
2005	Excerpt from U.S. District Court – National Judicial Caseload Profile for the Eastern District of Texas, March 31, 2025, https://www.uscourts.gov/sites/default/files/document/fcms_na_distprofile0331.2025.pdf
2006	Judge Rodney Gilstrap's median time to trial from August 25, 2024 until August 25, 2025, retrieved from www.docketnavigator.com
2007	Estoppel Gutted: A Pelican's Guide to Patent Litigation, https://patentlyo.com/patent/2025/05/estoppel-pelicans-litigation.html
2008	Declaration of Jin Sam Kwak
2009	List of Licensees to Wifi 6 from Sisvel, https://www.sisvel.com/licensing-programmes/Wi-Fi/wifi-6/#tab-list-of-licensees
2010	Letter re "Notice of Wi-Fi 6 License offer" from Sisvel to Samsung Electronics Co., Ltd. with Attachments 1-2, April 8, 2022
2011	Letter re "Notice of Wi-Fi 6 license offer – Follow-up to our letter dated August 24, 2022, and follow-up communications" from Sisvel to

Exhibit	Description
	Samsung Electronics Co., Ltd. with Attachments 1-2, January 18, 2023
2012	INTENTIONALLY LEFT BLANK
2013	Examiner's Notice of References Cited in Samsung application number 16/530,902
2014	U.S. Patent No. 11,102,740
2015	Declaration of Andrew D. Weiss in Support of *Pro Hac Vice* Recognition on Behalf of Patent Owner Wilus Institute of Standards and Technology Inc.
2016	Declaration of Zygmunt J. Haas, Ph.D.
2017	Memorandum Claim Construction Opinion and Order entered on December 23, 2025 in *Wilus Institute of Standards and Technology, Inc. v. Samsung Electronics Co., Ltd., et al.*, Case Nos. 2:24-cv-00746-JRG and 2:24-cv-00765-JRG (E.D. Tex.)
2018	Deposition transcript of Matthew Valenti, Ph.D., taken on February 5, 2026
2019	U.S. Patent Application Publication No. 2015/0124690, published on May 7, 2015 ("Merlin")

I. INTRODUCTION

Claims 1-10 of the U.S. Patent No. 11,116,035 ("'035 patent," Ex. 1001) (the "Instituted Claims") should be found to be patentable because Petitioner has failed to demonstrate the combination of Zhou, Cherian, and Kim render claim elements [1.4], [1.5], [8.3], and [8.4] obvious. These limitations, when properly construed, relate to setting and starting a parameter set timer based on multiple factors (whether an immediate response is requested by an MPDU, and the access category of the MPDU). None of the asserted references disclose these limitations, and Petitioner has failed to demonstrate that the limitations are obvious. For example, although required by these limitations, Petitioner's own expert, Dr. Valenti, has admitted that none of the references disclose starting a parameter set timer based on the acknowledge policy expressed in an MPDU, let alone the limitations of the '035 patent. Similarly, the Petition contains no evidence that setting and starting a parameter set timer based on the access category of an MPDU is disclosed by any of the cited references. Overall, the Petition reflects an improper approach of by using the limitations of claim 1 of the '035 patent as a roadmap to assert obviousness. This is impermissible hindsight and fails to establish obviousness of claim 1. The same deficiency applies to all challenged claims. Accordingly, Board should find that Petitioner has failed to meet its burden to unpatentability for any challenged claim.

II. THE '035 PATENT[1]

A. Overview

The '035 patent is entitled "Wireless communication method using enhanced distributed channel access, and wireless communication terminal using same." Ex. 1001 at 1 (54). The patent relates to wireless local area networks (WLANs), particularly to enhanced channel access methods in uplink multi-user (UL MU) transmissions under WiFi standards (e.g., IEEE 802.11ax/HE). *See* Ex. 1001 at 1:35-2:67 (Background Art). The inventors propose modified EDCA (Enhanced Distributed Channel Access) parameter settings for wireless communication terminals (STAs) that are triggered for multi-user uplink transmissions, with the goal of improving coexistence and reducing collisions. *Id.* This addresses congestion issues and allows higher capacity when multiple STAs contend for channel access in high-density environments. *Id.*

The '035 patent describes and enables an STA to switch between two sets of EDCA parameters: (1) legacy EDCA parameter set and (2) MU EDCA parameter set. *See id.* at Figs. 6-7 and associated written description. The legacy EDCA parameter set is used for normal standalone channel access. The MU EDCA parameter set is used when the STA is triggered or scheduled by an access point

[1] *See also*

(AP) for uplink MU transmissions, with less aggressive channel access behavior (e.g., larger contention windows, longer arbitration times). The STA sets a timer—"second parameter set timer" or MU EDCA timer—to define how long it should operate under the MU EDCA parameters before reverting to legacy EDCA.

As described in the '035 patent, "MU EDCA parameters" are a set of EDCA-like channel access parameters, allow differentiation of traffic categories (like voice, video, best effort, background), applied after successful multi-user uplink (UL) transmissions initiated by APs using trigger frames. *See id.* at Fig. 7 and associated written description. A MU EDCA timer is a countdown timer that controls how long a STA must apply MU EDCA parameters after a successful trigger-based MU transmission. *See id.* at 19:46-20:67. In regular EDCA, STAs contend for the channel in a distributed manner. But for trigger-based multi-user transmissions in 802.11ax, the participating STAs get benefits by having the chance to upload its own data from the AP's triggering. After a successful trigger-based MU transmission, the participated STAs should apply MU EDCA parameters for the time of MU EDCA timer. Thus, the MU EDCA timer helps channel access fairness between for example, legacy STAs and 11ax STAs.

These concepts are illustrated in exemplary embodiments of the '035 patent. As shown in Fig. 12, the STA switches to MU EDCA when an AP transmits a trigger frame for uplink MU transmission. After sending a trigger-based PPDU, the STA

sets the second parameter set timer. When it expires, the STA reverts to legacy EDCA. This is described in Figs. 13-14 and associated written description.

Figs. 16-17 describe additional exemplary features as described in the independent claims. *See id.* at 21:59-23:47. When the wireless communication terminal (STA) applies the MU EDCA parameter, the wireless communication terminal may set the MU EDCA timer. The STA may set the MU EDCA timer upon receiving the response to the trigger-based PPDU transmission. In this embodiment, the STA may apply the MU EDCA parameter set when three conditions are satisfied. *See id.* at 22:7-47.

The first condition is that the wireless communication terminal receives the trigger frame that triggers the transmission of the wireless communication terminal from the base wireless communication terminal. *Id.* The second condition is to transmit the trigger-based PPDU including the QoS data frame to the base wireless communication terminal according to the reception of the trigger frame. *Id.* The third condition is that the wireless communication terminal receives an immediate response to the trigger based PPDU from the base wireless communication terminal. *Id.* At this time, an immediate response may indicate that the recipient transmits a response to the originator within a predetermined time period during the same transmit opportunity (TXOP). *Id.*

When these three conditions are satisfied, the STA may apply the MU EDCA

parameter set to the AC of the QoS data frame included in the trigger-based PPDU transmitted by the wireless communication terminal. *Id.* In addition, the STA may apply the MU EDCA parameter set at the time point at which the immediate response reception for the trigger-based PPDU from the base wireless communication terminal is completed. *Id.* Also, when the conditions are satisfied before the MU EDCA timer expires, the STA may update the MU EDCA timer with a period corresponding to the MU EDCA parameter set. *Id.* When the MU EDCA timer expires, the STA terminates the MU EDCA parameter set application. *See generally* Figs. 16-17 and associated written description.[2]

[2] All emphasis added unless otherwise noted.

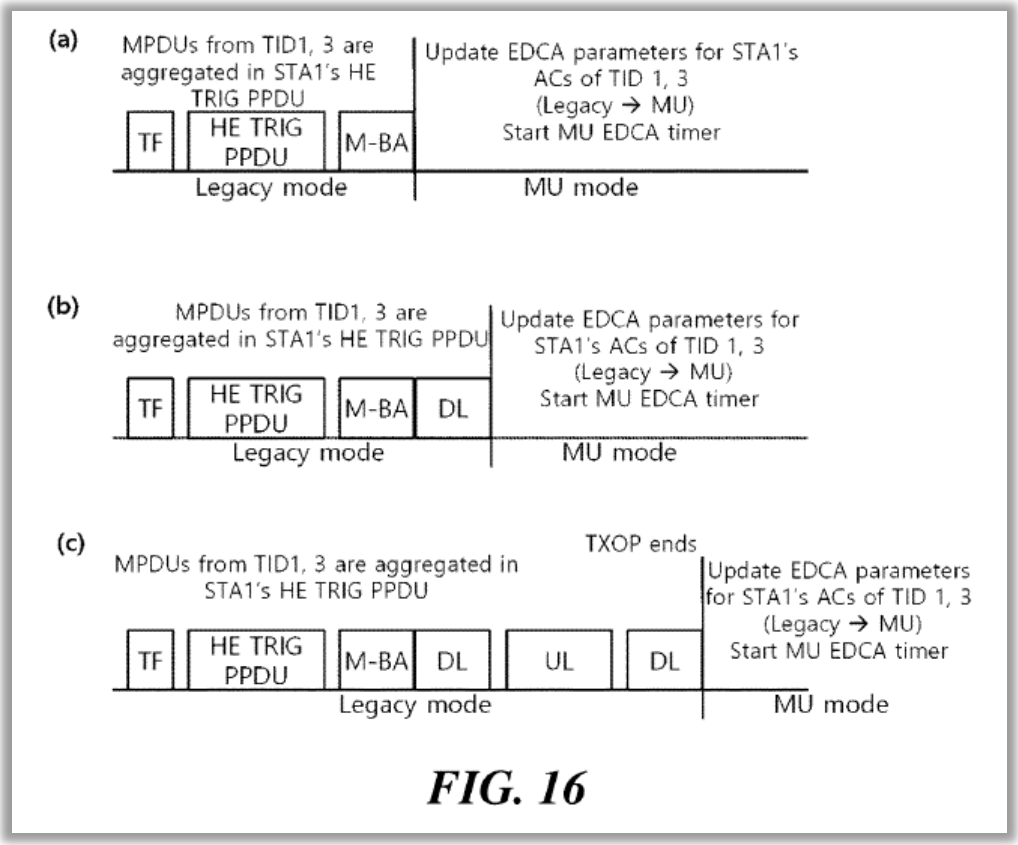

FIG. 16

B. Exemplary Benefits

As discussed in the declaration of Dr. Haas (Ex. 2016), the claimed inventions of the '035 patent has several benefits. *See* Haas Decl. ¶¶ 49-52.

The '035 patent aims to solve a problem related to configuring wireless networks that are designed to use both Wi-Fi 6 (also known 802.11ax) terminals and older, legacy standards (such as Wi-Fi 5/802.11ac).Among other things, Wi-Fi 6 improves on the parameter sets used by terminals to determine when and how send (upload) data to a base station (also known as an access point). These parameter sets are called Enhanced Distribution Channel Access ("EDCA") parameters. Wi-Fi 6

parameter sets are referred to generally in the art and in the '035 patent as "MU EDCA parameters." *Id.* While older terminals also use EDCA parameters, they do not understand Wi-Fi 6 MU EDCA parameters. This means that, at any given time, terminals connected to a base station could be using different EDCA parameters sets.

The '035 patent specifies a system and method designed to efficiently design a network comprised of both Wi-Fi 6 terminal and legacy terminals. In particular, the claimed invention sets out specific rules for when a Wi-Fi 6 terminal should use MU EDCA parameters, and for when a terminal should stop using MU EDCA parameters and revert back to legacy parameters. Unlike other systems, including those in the references cited by Petitioner and Dr. Valenti, the claimed invention of the '035 patent ensures that the base station is aware of when a Wi-Fi 6 terminal will revert to using legacy EDCA parameters.

The invention of the '035 patent is important because of a well-known problem in wireless networks, collisions. In simple terms, collisions occur when two terminals attempt to the use same wireless frequency at the same time. Collisions are problematic because, when they occur, neither terminal is able to effectively send data and that transmission window is wasted. Collisions are disruptive to the wireless network and can cause detriments, including but not limited to slower speeds and lost data. Wireless networks therefore utilize collision avoidance schemes to avoid these collisions.

The transmission methods and collision avoidance schemes are different between Wi-Fi 6 and legacy Wi-Fi protocols. As a result, if a base station is unaware of when Wi-Fi 6 terminals will be using MU EDCA parameters or legacy parameters, the base station is less effective at managing and avoiding collisions among the terminals connected to it. Using the system of the invention, however, a base station is able to know whether the Wi-Fi 6 terminals connected to it are using MU EDCA parameters and will be able to manage the legacy terminals in such a way to avoid collisions.

C. Priority Date

The claims of the '035 patent claim priority to a Korean '822 application (10-2016-0114822) filed on September 7, 2016. Ex. 1001 at 1, (30). Petitioner asserts that "all references presented in this Petition pre-date September 7, 2016 and, thus, constitute prior art." Pet. at 2. Patent Owner agrees that the claims are entitled to a priority date no earlier than September 2016. The Petition doesn't challenge the priority and treats September 2016 as the operative priority date. *See* Pet. at 2. Thus, Patent Owner will adopt that date for purposes of this IPR.

D. Challenged Claims

The challenged claims of the '035 patent are claims 1-10. Pet. at 1. Claims 1 and 8 are independent claims and claims 2-7 and 9-10 are dependent claims. Independent claim 1 recites:

Identifier	Claim Language
[1.pre]	A wireless communication terminal that wirelessly communicates with a base wireless communication terminal, the wireless communication terminal comprising:
[1.0]	a transceiver; and
[1.1]	a processor,
[1.2]	wherein the processor is configured to: transmit, to the base wireless communication terminal, a trigger-based physical layer protocol data unit (PPDU) using the transceiver,
[1.3]	switch a parameter set, which is a set of parameters used for the channel access, from a first parameter set to a second parameter set based on whether the base wireless communication terminal triggers a multi-user uplink transmission participation of the wireless communication terminal,
[1.4]	when a MAC protocol data unit (MPDU) included in the trigger-based PPDU does not request an immediate response, set a second parameter set timer for an access category of the MPDU when the transmission of the trigger-based PPDU ends,
[1.5]	when the MPDU included in the trigger-based PPDU requests the immediate response, set the second parameter set timer for the access category of the MPDU for which immediate response is received,
[1.6]	when the second parameter set timer expires, terminate an application of the second parameter set, and
[1.7]	access a channel according to a priority of data to be transmitted to the base communication terminal by the wireless communication terminal and the parameter set.

III. PROSECUTION HISTORY OF THE '035 PATENT

The '035 patent issued from U.S. Application No. 16/294,883, filed March 6, 2019. Ex. 1002 ('035 FH) at 1536. On June 23, 2020 the Examiner issued a non-final rejection rejecting the currently pending claims (claims 21-40) as being obvious over combinations of references including Cherian and Zhou. *Id.* at 721-737.

On September 22, 2020, the Applicant submitted an amendment and request for reconsideration after non-final rejection. *Id.* at 699-710. The applicant amended pending claim 21 as follows, replacing the limitation "set a second parameter set timer based on whether a response to a MAC protocol data unit (MPDU) included in the trigger based PDDU is received" with two "when" clauses (*id.* at 700):

Listing of claims

1-20. (Canceled).

21. (Currently Amended) A wireless communication terminal that wirelessly communicates with a base wireless communication terminal, the wireless communication terminal comprising:

a transceiver; and

a processor,

wherein the processor is configured to:

transmit, to the base wireless communication terminal, a trigger-based physical layer protocol data unit (PPDU) using the transceiver,

switch a parameter set, which is a set of parameters used for the channel access, from a first parameter set to a second parameter set based on whether the base wireless communication terminal triggers a multi-user uplink transmission participation of the wireless communication terminal,

when a MAC protocol data unit (MPDU) included in the trigger-based PPDU does not request an immediate response, set a second parameter set timer for an access category of the MPDU when the transmission of the trigger-based PPDU ends,

when the MPDU included in the trigger-based PPDU requests the immediate response, set the second parameter set timer for the access category of the MPDU for which immediate response is received,

~~set a second parameter set timer based on whether a response to a MAC protocol data unit (MPDU) included in the trigger-based PPDU is received,~~

when the second parameter set timer expires, terminate an application of the second parameter set, and

access a channel according to a priority of data to be transmitted to the base communication terminal by the wireless communication terminal and the parameter set.

The Applicant also addressed and distinguished Cherian in view of Zhou as follows. It noted that Cherian and Zhou fail to disclose, teach, or suggest the added "when" limitations. *Id.* at 706. As to Cherian, the Applicant noted that "The Office Action acknowledges that 'Cherian does not explicitly teach, wherein the processor is configured to determine when to set the second parameter set timer based on a type of responding requested by the MPDU included in the trigger-based PPDU"

(Office Action: page 11).'" *Id.* Accordingly, Cherian does not disclose, teach, or suggest the "when" limitations added by amendment. *Id.*

As to Zhou, the Applicant explained that Zhou failed to cure the deficiencies of Cherian with respect to the "when" limitations. *Id.* at 707. In the Office Action, the Examiner indicates that "Zhou teaches the wireless communication terminal may set second parameter timer after the wireless communication terminal transmits a scheduled UL transmission, or transmits a scheduled UL transmission and gets an ACK message (Provisional application No. 62/278,268: ¶[0081])." *Id.* The Applicant then distinguished Zhou in several ways.

The Applicant explained that paragraph [0081] of Provisional Application No. 62/278,268 of Zhou states that "the STA 106 may reset timer/counter to zero *after the STA 106 transmits a scheduled UL transmission, or transmits a scheduled UL transmission and gets an ACK message*" (emphasis added)." *Id.* But "reset[ting] timer/counter to zero after the STA 106 transmits a scheduled UL transmission, or transmits a scheduled UL transmission and gets an ACK message" in Zhou is ***not*** a disclosure, teaching or suggestion of the "when" limitations. Further, the "scheduled UL transmission" referred in paragraph [0081] of Zhou does not indicate a type of response, but instead it indicates an initiation type of the UL transmission. *Id.* Additionally, nowhere does Zhou mention the "*immediate response*" recited in pending claim 21 (emphasis added). *Id.* For these reasons, the Applicant argued,

Zhou does not cure Cherian's failure to teach the "when" limitations.

On January 19, 2021, the Examiner issued a notice of allowability for pending claims, including pending claim 21. *Id.* at 362-365. The Examiner indicated that the notice of allowability was responsive to the Applicant's September 22, 2020 amendment and request for reconsideration. *Id.* at 362. This indicates that the Examiner credited the Applicant's arguments and agreed that Cherian in view of Zhou did not render obvious the allowed claims of the '035 patent.

IV. LEVEL OF ORDINARY SKILL IN THE ART

Petitioner proposes the following definition for a person of ordinary skill in the art (POSITA): a POSITA "would have had a bachelor's degree in electrical engineering, computer engineering, computer science, or a related field, and at least 3 years of experience in the research, design or development of wireless communication devices, systems, and/or networks, or the equivalent, as of the Critical Date. Increased educational experience can make up for less work experience, and vice versa." Pet. at 4 (citations omitted). For purposes of this preliminary response, Patent Owner does not challenge Petitioner's proposed definition. Patent Owner reserves the right to challenge the definition or propose an alternative definition if IPR is instituted.

V. CLAIM CONSTRUCTION

The Federal Circuit has held that "only those terms need be construed that are in controversy, and only to the extent necessary to resolve the controversy." *Vivid Techs., Inc. v. Am. Sci. & Eng'g, Inc.*, 200 F.3d 795, 803 (Fed. Cir. 1999). This principle applies equally to IPR proceedings. *See, e.g., Apple Inc. v. Uniloc Luxembourg S.A.*, IPR2018-00420, Paper 7 at 8 (PTAB, Aug. 6, 2018).

A. "Set[ting] [A/The] . . . Timer" Means "Assign[ing] A Duration To Start[ing] [A/The] . . . Timer"

The parties disputed the construction of the "set"/"setting" term of claims 1 and 8 in the co-pending district court case. Ex. 2017 at 8-19. The parties disputed whether this term includes only "assigning a value to the timer, as [Petitioner] urges, or whether it includes also *starting* the timer, which is [Patent Owner]'s position." *Id.* at 8. The district court adopted Patent Owner's proposal, holding that in the context of the claim language, "setting" "would necessarily include both choosing for how long the timer will run and starting it." *Id.* at 10-11. The district court found that both the plain meaning of the term as used in the claims, and the relevant aspects of the specification supported Patent Owner's proposed construction. *Id.* at 11-13. The district court, for example, relied on the description of Fig. 14 in the specification that a "certain time elapses *from when the timer is set*." *Id.* at 11 (quoting SAMSUNG-1001 at 19:46-50 (emphasis added by district court)); *see also*

id. (citing SAMSUNG-1001 at 20:25-30). The district also relied on Fig. 15(a) and its accompanying description in the specification. *Id.* at 11-12 (citing and quoting SAMSUNG-1001 at 21:5-7, 21:11-16).

The district court rejected Petitioner's arguments. *Id.* at 12-13. The district court rejected Petitioner's claim differentiation argument between set, start and reduce, finding that Petitioner's arguments were contrary to the specification. *Id.* In particular, the district court held that it was clear that the specification uses the terms "set" and "start" interchangeably. *Id.*

Petitioner and Dr. Valenti do not address this claim construction. Even at deposition, well after the district court entered its claim construction, Dr. Valenti did not consider the district court's construction. Ex. 2018 at 110:3-25.

For the same reasons as already found by the district court, Patent Owner requests that the Board also construe "set[ting] [a/the] … timer" as used in claims 1 and 8 of the '035 patent as "assign[ing] a duration to and start[ing] [a/the] … timer." Additionally, given Dr. Valenti's testimony at deposition, the Board should disregard any argument or further testimony submitted by Petitioner regarding this construction on reply. Dr. Valenti was offered the opportunity a deposition to explain how his opinion was consistent with district court's construction, but he declined.

VI. OVERVIEW OF PRIOR ART

A. Zhou (Ex. 1004)

Zhou is U.S. patent application publication (Pub. No. US 2017/0202023). Zhou is entitled "Methods and apparatus for selecting enhanced distributed channel access parameters for different stations." Ex. 1004 at 1 (54).

According to the Abstract: "In some aspects, a method for configuring channel access parameters in a wireless communication system includes determining, at an access point, an enhanced distributed channel access (EDCA) parameter for a first subset of stations of a plurality of stations, the first subset of stations capable of transmitting multi-user uplink transmissions." *Id.* at 1 (57). "The method further includes generating an information element including the EDCA parameter. The method further includes transmitting the information element such that the information element is decodable by the first subset of stations and not by a second subset of stations of the plurality of stations." *Id.*

Fig. 5 of Zhou shows a flow chart of an implementation of a method 500 of wireless communication in a wireless communication system. The method 500 may be used to generate and/or transmit any of the EDCA parameters, the information element 300, or EDCA parameter set IE 400 described in connection with FIGS. FIGS. 3-4. Ex. 1005 at [0077]:

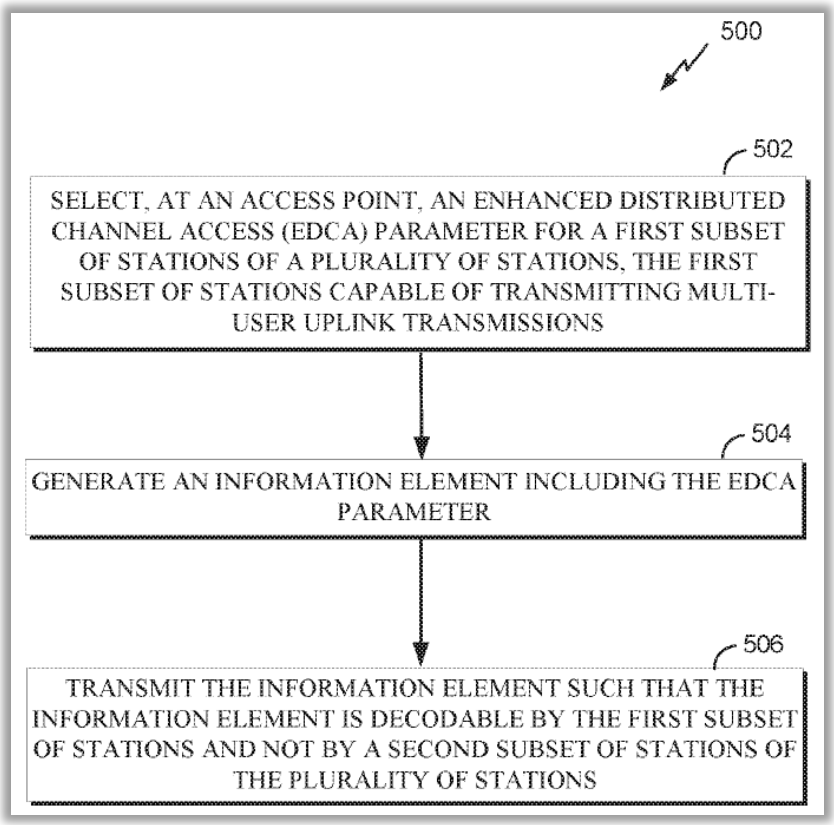

FIG. 5

Zhou further states, regarding Figure 5, that: "Although the method steps may be described as occurring in a certain order, the steps can be reordered, omitted, and/or additional steps may be added." *Id.*

B. Cherian (Ex. 1006)

Cherian is a U.S. patent application publication (Pub. No. US 2017/0325264). Cherian is entitled "Backoff techniques for transitioning between single-user and multi-user modes." Ex. 1006 at 1 (54).

According to the Abstract: "Methods and apparatus for determining backoff values when transitioning between single-user (SU) and multi-user (MU) modes are provided." *Id.* at 1 (57). "A station (STA) transitions from a Single-User (SU) mode, in which a first set of parameters is used to attempt to access a medium, to a Multi-User (MU) mode, in which a second set of parameters is used to attempt to access the medium." *Id.* "The STA determines, upon transitioning back from the MU mode to the SU mode, one or more values to use for setting corresponding one or more of a set of backoff counters." *Id.* "The STA attempts, after setting the one or more backoff counters, to access the medium for one or more SU transmissions based on the set of backoff counters."

C. Kim (Ex. 1007)

Kim is a U.S. patent application publication (US 2018/0034595). Kim is entitled "Method for transmitting and receiving policy indicator-based acknowledgement/ non-acknowledgement signal in wireless lan system, and device therefor." Ex. 1008 at 1 (54).

The Abstract states: "According to the present invention an AP transmits a trigger frame to a plurality of stations (STAs), and transmits an ACK/NACK signal for data received from the plurality of STAs when the data is received from the plurality of STAs in response to the trigger frame." *Id.* at 1 (57). "At this time, an ACK policy value having a specific value is set in one or more STAs among the

plurality of STAs, the AP transmits, through a multi-user block ACK (M-BA) frame, an ACK/NACK signal for STAs excluding the one or more STAs among the plurality of STAs, and the ACK/NACK signal for the one or more STAs is transmitted in response to a block ACK request message received from the one or more STAs." *Id.*

VII. CHERIAN IS NOT PRIOR ART AND BECAUSE ALL GROUNDS RELY ON CHERIAN, THE ENTIRETY OF THE PETITION FAILS

All of Petitioner's grounds rely on a combination of Zhou, Cherian, and at least one additional reference. Petitioner relies on two publications for its arguments regarding the Cherian reference: U.S. Patent Application Publication No. 2017/0325264 (SAMSUNG-1006), which was published on November 9, 2017; and Provisional Patent Application No. 62/333745 (SAMSUNG-1007), which was not publicly available until approximately 18 months after the Cherian application was filed (approximately October 2018). The '035 patent is entitled to a priority date of no later than September 7, 2017 because it is a continuation of PCT Application No. PCT/KR2017/009841. SAMSUNG-1001 at Cover (63). The '035 patent therefore indisputably filed *before* Cherian was publicly available.

35 U.S.C. § 311(b) limits IPR challenges to "prior art consisting of patents or printed publications." Cherian was abandoned (Ex. 1006) and therefore it cannot be considered a patent under § 311(b). Cherian can therefore only be considered as a

printed publication. But as a printed application, it was not available until ***after*** the priority date of the '035 patent. Cherian is therefore not prior art. Because the disclosure of Cherian forms a substantial part of each Ground asserted by Petitioner, and Petitioner has no argument or evidence that combinations without Cherian render any of the Instituted Claims obvious, the Instituted Claims should be found patentable.

A petition for certiorari addressing this same issue is currently pending before the U.S. Supreme Court, *Lynk Labs, Inc. v. Samsung Electronics Co.*, No. 25-308 (U.S.). There, like here, Samsung (the same entity as Petitioner) relied on back-dating a patent application publication even though a patent was never issued from the application. The Federal Circuit rejected Lynk Labs' argument, finding that a patent application publication can be back-dated like a patent. *Lynk Labs, Inc. v. Samsung Electronics Co., Ltd.*, 125 F.4th 1120, 1127 (Fed. Cir. 2025). Patent Owner believes, however, that this decision is inconsistent with the statutory authority and the Supreme Court may grant certiorari to reverse the Federal Circuit's ruling. If it does, the Board should find that Petitioner has failed to meet its burden.

VIII. GROUND 1: CLAIMS 1-3, 8-10 ARE NOT OBVIOUS IN VIEW OF ZHOU, CHERIAN, AND KIM

A. Petitioner Fails To Show That Zhou, Cherian, And Kim Disclose The Conditional Setting Of The Second Parameter Set Timer As Required In Claims [1.4], [1.5], [8.3], And [8.4]

Claims [1.4] and [1.5] include the limitation "set [a/the] second parameter set timer," and claims [8.3] and [8.4] include the limitation "setting [a/the] second parameter set timer." E.g., the limitations recite:

Identifier	Claim Language
[1.4]	switch a parameter set, which is a set of parameters used for the channel access, from a first parameter set to a second parameter set based on whether the base wireless communication terminal triggers a multi-user uplink transmission participation of the wireless communication terminal,
[1.5]	when a MAC protocol data unit (MPDU) included in the trigger-based PPDU does not request an immediate response, set a second parameter set timer for an access category of the MPDU when the transmission of the trigger-based PPDU ends,

As discussed above, these terms have been construed by the district court as "assign[ing] a duration to and start[ing] [a/the] … timer," rejecting Petitioner's argument that this limitation is met merely by assigning a value to a timer. Ex. 2017 at 8-19. The claimed timer is set based on whether the wireless communication terminal requests an immediate response (or not) in an MPDU. In this manner, the

claim limitations provide certainty as to when the terminal will revert back to the first parameter set at a time known to both the terminal and base station. *See* Haas Decl. ¶¶ 78-81.

Petitioner argues that the Zhou-Cherian-Kim combination renders this aspect of the claims obvious because Cherian (SAMSUNG-1006, SAMSUNG-1007) discloses the general concept of a parameter set timer, Zhou (SAMSUNG-1004, SAMSUNG-1005) purportedly discloses the setting of a timer based on the request for an immediate response (Pet. at 45-49), and Kim (SAMSUNG-1008) discloses using an MPDU to set an ACK policy (Pet. at 40-45).

As an initial matter, Patent Owner notes that the Examiner issued these claims over effectively the same combination of art and after making a similar argument overcome by the inventors' argument. SAMSUNG-1002 at 731-32 (Examiner concluding limitation is obvious in view of Zhou and Cherian), 707-08 (inventors arguing that Zhou does not set a timer based on whether an MPDU requests an immediate response), 360-64 (Examiner issuing Notice of Allowance in response to inventor's arguments). Though Petitioner adds Kim, Petitioner also argues that the "acknowledgment protocols" added by the Kim reference "were a well-known and widely used technique." Pet. at 24. Indeed, at least one of the references considered by the examiner, Merlin-690 (Ex. 2019), had disclosure similar to Kim's "well-known and widely used" "acknowledgment policy." Haas Decl. ¶ 82. The addition

of Kim does not add any disclosure that the Examiner did not likely already consider when withdrawing the rejection and allowing the patent.

Though Dr. Valenti indicates he was aware of at least some of these aspects of the file history (SAMSUNG-1003 at ¶¶ 71-72; Ex. 2018 at 34:18-37:3), he testified he did not consider how the Examiner's contrary findings impacted his opinions. Ex. 2018 at 37:19-25. Petitioner and Dr. Valenti simply ignore evidence that contradicts their conclusion. The Board should not ignore this evidence. Especially in light of the Examiner's rejection of Petitioner's argument, Petitioner has not met its burden. *See also id.* at 86:22-88:21 (though the Examiner and Dr. Valenti use different orderings of Zhou and Cherian, Dr. Valenti testified the order does not matter).

Moreover, Petitioner does not address how the claimed conditional starting of the parameter set timer is rendered obvious by its combination. *See* Haas Decl. ¶¶ 83-86. The Petition and Dr. Valenti do not describe how this claimed functionality is disclosed by any of their references, or how the combination renders the functionality obvious. *See* Pet. at 55-56 (arguing obviousness based on Kim's MPDU ACK policy, Cherian's timer, and Zhou's conditional "reset" timing for supposedly setting a timer; no mention is made of starting). Petitioner does not argue that Cherian or Kim disclose this claim requirement. Indeed, at deposition, Dr. Valenti testified that the portions of Zhou he cites ***do not even disclose starting a timer at all***. Ex. 2018 at 111:5-112:18 (clarifying that he did not "actually think that

Zhou discloses that [the timer] is running, you know, one way or the other"). Dr. Valenti confirmed that Zhou's resetting (which he equates in a conclusory manner to setting) is separate from actually starting the timer. *Id.* There is no evidence, therefore, in the record of the claimed starting a timer based on the MPDU is obvious.

Additionally, unlike the claimed invention, Zhou (the only reference Petitioner argues discloses setting a timer based on an MPDU) describes a system where the time that it ceases to use MU EDCA parameters (the "second parameter set") is variable, dependent on conditions at Zhou's STA (the "terminal"). SAMSUNG-1005 at [0079]; *see* Haas Decl. ¶¶ 86-89. When Zhou's STA will switch to legacy mode is not necessarily known to the base station, a feature of the '035 patent's claimed invention discussed above. In particular, Zhou's STA "may revert back to legacy mode EDCA parameters if selecting scheduled mode (MU) EDCA parameters gives poor performance." *Id*. Three potential criteria for this reversion are described by Zhou: "X," which is the number of seconds since the STA was scheduled for transmission; "Y," which is the number of non-scheduled transmission fails; or "Z," which is the maximum number of times a buffer status report should be sent without being scheduled. *Id.* Zhou describes the use of a "timer/counter to count X/Y/Z." *Id.* at [0081]. Zhou's timer/counter is reset (i.e., the time that Zhou's MU EDCA parameter is used is extended) based on a number of potential conditions,

including the conditions cited by Petitioner (UL transmission or receipt of an ACK). *Id*.

Zhou does not disclose the claimed timer "setting" based on whether an immediate response is requested. See Haas Decl. ¶¶ 87-88. As reflected in the proper construction of the "setting" term, the claimed timer in the '035 patent has at least two features: (1) a duration that is assigned; and (2) a live value counter that is started to determine when the assigned duration has been reached. In Zhou, the duration of the "timer/counter" (the value of "X/Y/Z") has nothing to do with the reset conditions described in paragraph [0081]. *See* SAMSUNG-1005 at [0080] (describing that, since they are based on identifying poor performance, factors such as latency or AP/STA negotiation are used to determine "X/Y/Z"). The duration of Zhou's timer is therefore not set based on the MPDU at all, and Zhou therefore does not disclose or render obvious the claimed limitation. *See* Haas Decl. ¶¶ 87-88

Zhou also does not disclose starting a timer based on whether an MPDU requests an immediate response. *See id.* at ¶¶ 88-89. The portion of Zhou identified by Petitioner (paragraph [0081]) refers to "resetting" the live value counter to 0. This means that the timer was ***already*** started, and the starting of the timer has nothing do with the reset conditions discussed in paragraph [0081]. This is further supported by the described durations of Zhou's timer ("X" seconds since last transmission, "Y" attempts since last failure, "Z" buffer status reports sent). SAMSUNG-1005 at

[0079]. None of these condition are based on whether an MPDU requests an immediate response. For this reason as well, Zhou does not disclose the conditional setting of a timer as claimed. *See* Haas Decl. ¶¶ 88-89.

Cherian and Kim do not disclose the functionality missing from Zhou. *See id. See* Ex. 2018 at 95:2-7, 97:5-12 (neither Kim nor Cherian disclose an EDCA timer based on an acknowledgment policy), 112:25-113:5 ("I don't have an opinion of when Cherian sets the timer"). As Petitioner admits, Cherian discloses only "a timer corresponding to the period of time during which UL-MU transmissions should occur." Pet. at 39 (citing SAMSUNG-1007 at [0058], [0063]), 45-46 (describing how Cherian's timer "indicates the duration of time, in units of TUs, for which the provided MU EDCA parameters are valid after reception of a Trigger frame" (citing SAMSUNG-1007 at [0042], [0063], [0058]).[3] And Petitioner makes no argument that Kim discloses a timer at all. *See* Pet. at 45-49; Ex. 2018 at 87:5 ("There's not a timer in Kim."), 87:20-24 ("it doesn't disclose setting a timer"). The combination of Zhou, Cherian, and Kim therefore do not disclose the claimed conditional setting of

[3] The timer in Cherian relied on by Petitioners, the MU EDCA timer, is the timer based on the receipt of a Trigger frame. Cherian also discusses a "timeout period," and Petitioner and Dr. Valenti cite to evidence discussing this period. The timeout period is not the timer claimed in the '035 patent. Cherian's "timeout period" is a period between triggering events. SAMSUNG-1007 at [0049] (disclosing that a "subsequent trigger frame" may not be received "before a preconfigured timeout period"), [0058]. It does not resolve the deficiencies identified by Patent Owner.

a timer based on the MPDU. *See* Haas Decl. ¶ 89.

Petitioner attempts to overcome the deficiencies of the Zhou, Cherian, and Kim by arguing that "determining when to set the timer is a design choice—described in Zhou—with a finite number of options." Pet. at 47. This argument, however, demonstrates Petitioner's use of impermissible hindsight. *See* Haas Decl. ¶ 90. Indeed, the prohibition on the use of hindsight was created expressly because the law accepts that the basic building blocks for any invention are already known. *E.g.*, *TQ Delta, LLC v. CISCO Sys., Inc.*, 942 F.3d 1352, 1357 (Fed. Cir. 2019). Just because there are "finite" choices does not (and should not) make an invention obvious. The "finite" choices here are, however, numerous and evidence of hindsight, not obviousness. Moreover, Petitioner's arguments are a result of multiple purported design choices and/or multiple permutations of purported design choices, not a single choice. *See* Haas Decl. ¶¶ 90-97.

First, without the benefit of the claims of the '035 patent as a roadmap, a POSITA would need to have found it obvious to alter Zhou's method of transitioning between parameter sets (a method based on poor performance) with Cherian's use of an overall parameter set timer. Other design choices existed, including using other poor performance factors (which would have been a simple extension of Zhou) or other non-timer-based factors. Haas Decl. ¶ 91.

Indeed, the Cherian/Zhou inventors themselves did not find it obvious to

modify Zhou method of transitioning parameter sets with Cherian's method. The Cherian and Zhou patent applications were filed within 3 months of each other, and involve the same inventors. If it were obvious and beneficial to modify Cherian as Petitioner and Dr. Valenti now argue in hindsight, the inventors likely would have disclosed as much. This is further evidence that the only viable motivation to combine Zhou and Cherian is hindsight knowledge of the claims. Haas Decl. ¶ 92.

Second, having made the first choice and again without the benefit of the claims a roadmap, a POSITA would have to have found it obvious to further modify Zhou and Cherian to change when Cherian's parameter set timer starts to start dependent on whether the MPDU requests an immediate response. At this point, there were also a number of additional design choices. For example, even if a POSITA was motivated to change Zhou's disclosure in favor of a different parameter set timer, the timer could be set and started at multiple times, including when the trigger is received, after an ACK to the trigger frame is sent, after the ACK is received, when the transmission of the PPDU begin, or any variety of times after the PPDU is transmitted. Haas Decl. ¶ 93. Indeed, even though Petitioner relies on the disclosure, a POSITA would also need to make the design choice to discard the timer resetting functionality of Zhou. *Id.*

Third, as discussed below, after making the two previous design choices, the combination of Zhou, Cherian and Kim is not enough. Haas Decl. ¶¶ 94-95. Without

hindsight knowledge of the claims, a POSITA would have to yet further modify the disclosures of Zhou, Cherian, and Kim to use a parameter set timer for each access category, a feature not disclosed anywhere in Zhou, Cherian or Kim. Again, there were other design choices, including using a single timer (as Cherian does), using access categories to alter the value of the single timer, or numerous other factors dependent on the design choices above. Haas Decl. ¶¶ 94-95.

In other words, at each of multiple steps needed to modify Zhou, numerous options would have been available to a POSITA. *Id.* Contrary to Petitioner's conclusory argument, its obviousness argument is not the result of a single design choice. At each step, the possible design changes were numerous and varied. Petitioner's argument that it was simply a design choice with "finite" choices is nothing but an attempt to obfuscate the hindsight at the core of its argument. And this is further supported by the fact that the Examiner considered effectively the same combination of references and knowledge, and the Examiner concluded the claimed invention was novel and non-obvious.

In the Institution Decision (Paper 12), the Board found that "Zhou expressly discloses multiple options for resetting the timer," citing to the disclosure and argument addressed above. Paper 12 at 13. As described above, the "resetting" described in Zhou is not the claimed "setting," as properly construed. Zhou's resetting neither assigns a duration (the "X/Y/Z" was previously assigned) nor does

it start the timer (it was already running). Instead, it merely resets the counter portion of the time to zero. In other words, Zhou's "resetting" is really extending the duration. *See* Haas Decl. ¶ 96. It does not describe the claimed "setting [a/the] second parameter set timer." *Id.*

Accordingly, the Board should find that Petitioner has not met its burden to show that claims 1 and 8 are unpatentable. Because all of the other instituted claims depend on claims 1 and 8, all of the other claims should similarly be found to be not unpatentable. The same deficiency applies to all challenged claims. [4] Accordingly, Petition fails to meet its burden that any challenged claim is unpatentable.

B. Petitioner Fails To Show That Zhou, Cherian, And Kim Disclose The Set-ting Of A Second Parameter Set Timer For An Access Category As Required In Claims [1.4], [1.5], [8.3], And [8.4]

Claims [1.4], [1.5], [8.3], and [8.4] require the second parameter set timer be set "for an access category of the MPDU." Petitioner has not met its burden to show that this limitation is rendered obvious by the combination of Zhou, Cherian, and Kim. *See* Haas Decl.¶¶ 98-104.

Petitioner does not argue that any of its references disclose this limitation.

[4] The deficiencies discussed for independent claim 1 applies to all challenged claims 1-10. Dependent claims 2-7 depend on claim 1, and the Petition relies on the same theory for the limitations of claim 1 that appear in claims 2-7. *See* Pet. 63-67, 77-82, 88-96. Claim 8 is an independent claim. For elements [8.3] and [8.4], the Petition cites its showing for elements [1.4] and [1.5]. *See id.* at 70. Thus, the same deficiency discussed for claim 1 applies to claim 8 and dependent claims 9-10.

Indeed, Petitioner has not cited to any disclosure in any of its references that perform any functionality based on the "access category of the MPDU," as required by claims [1.4], [1.5], [8.3], and [8.4]. This limitation is simply something that Petitioner and Dr. Valenti conclude is obvious view of Zhou and Cherian. Pet. at 49-53; SAMSUNG-1003 at ¶¶ 143-148. Petitioner's argument is based on improper hindsight.

Petitioner's hindsight basis for its argument is demonstrated by the record evidence. *See* Haas Decl.¶¶ 101. During prosecution, pending claim 23 claimed this functionality. SAMSUNG-1002 at 931. Though the Examiner found that the combination of Zhou and Cherian rendered other then-pending claims obvious, the Examiner made no such finding for the combination of Zhou and Cherian. *Id.* at 729. Indeed, as to Cherian, the Applicant noted that "The Office Action acknowledges that 'Cherian does not explicitly teach, wherein the processor is configured to determine when to set the second parameter set timer based on a type of responding requested by the MPDU included in the trigger-based PPDU' (Office Action: page 11).'" *Id*. at 706. And the Examiner allowed the claims over this combination. *See* Haas Decl. ¶ 101.

The references themselves further demonstrate the Petitioner's conclusion is simply hindsight. *See* Haas Decl.¶¶ 101-103. As Petitioner argues, both Zhou and Cherian were well aware of access categories and the use of MU EDCA parameters

specific to each category. But neither Zhou nor Cherian disclose the claimed parameter set timer based on the access category of the MPDU. Zhou discloses the use of MU EDCA parameters to set backoff timers[5] for each access category. SAMSUNG-1005 at [0002]. Zhou does not disclose the use of access category-based timers for how long its MU EDCA parameters remain valid (as claimed). Zhou offers a number of potential methods for invaliding MU EDCA parameter based on signal quality, none of which are based on access categories. *See* SAMSUNG-1005 at [0079]-[0081]. Cherian's disclosure is similarly deficient. *See* Pet. at 50 (citing Cherian's Fig. 6 that shows access categories). But, like Zhou, despite being aware of access categories, Cherian discloses only using a timer for the overall use of MU EDCA parameters (the MU EDCA Timer, also shown in Fig. 6), not one based on access categories. Like the Examiner, the Cherian inventors did not find the use of access category-based timers obvious.

Petitioner and Dr. Valenti provide nothing but *ipse dixit* for the assertion that the combination of Zhou and Cherian render the "for an access category of the MPDU" limitation obvious. Haas Decl. ¶¶ 103. Without evidence or explanation,

[5] The backoff timer is a collision-avoidance mechanism. It decrements when the transmission medium is idle and pauses when the medium is busy. A smaller backoff timer value gives data a higher priority to be sent faster. The backoff timer values are set by the MU EDCA parameters. Cherian's MU EDCA timer is different than a backoff timer. Ex. 2018 at 108:22-110:2.

Petitioner argues that it would not only be obvious to use separate timers for how long different aspects of an MU EDCA parameter set is valid, but that it would have been obvious to use timers based on the access category of the MPDU. This is inappropriate hindsight.

Accordingly, the Board should find that Petitioner has not it burden regarding claims 1 and 8, and they have not been proven to be unpatentable. Because all of the other instituted claims depend on claims 1 and 8, all of the other claims should similarly be found to be not unpatentable.

C. Petitioner Fails To Show Motivation to Combine

A further deficiency with the Petition is its failure to show motivation to combine. As explained in Dr. Haas's declaration, Petitioner and Dr. Valenti's motivation to combine assertions are infected by hindsight and fail to show that a POSITA would be motivated to combine the references they choose to arrive at the claimed invention of the '035 patent claims. *See* Haas Decl. ¶¶ 64-75.

Petitioner and Dr. Valenti do not provide sufficient explanation as to why a POSITA would have found it obvious, in light of the need for better management of "channel access parameters and transitions between different operational modes," to combine Zhou, Cherian, and Kim. Haas Decl. ¶ 66. Petitioner and Dr. Valenti appear to simply use their knowledge of the claim limitations to find various isolated statements in the prior art that they combine. *Id.* For example, Cherian already

discloses a way of managing parameter set transitions: Cherian's MU EDCA timer. Cherian's MU EDCA timer "indicates the duration of time, in units of TUs, for which the provided MU EDCA parameters are valid after reception of a Trigger frame. SAMSUNG-1007 at [0063]. Similarly, Zhou discloses its own parameter set transition method based on performance. SAMSUNG-1005 at [0079]. Petitioner and Dr. Valenti do not explain why a POSITA would have been motivated to modify Cherian's disclosed system.

Petitioner and Dr. Valenti conclude the existence of motivation based on five factors. Pet. at 21-25; SAMSUNG-1003 at ¶¶ 92-98. But all of Petitioner's and Dr. Valenti's factors are inadequately supported. Haas Decl. ¶ 67. They rest on generic labels such as "optimizing" performance and increasing "efficiency" that may apply to nearly any computer or communications system and suggest improper hindsight bias. *See id.* at ¶¶ 67-74.

The first factor identified by Petitioner and Dr. Valenti is "to optimize transitions between SU and MU Modes." Pet. at 21-22; SAMSUNG-1003 at ¶ 94. Both Cherian and Zhou already disclose methods for optimizing transitions between legacy and MU EDCA parameters. Petitioner and Dr. Valenti identify no drawbacks of these individual methods, and they do not explain why a POSITA would have found it advantageous to modify either Cherian's or Zhou's method. Petitioner and Dr. Valenti also fail to demonstrate how Cherian's or Zhou's method is not efficient,

or how the combination of Cherian's method, Zhou's method, and Kim's method (which Dr. Valenti does not describe) is an "optimization."

The second factor identified by Petitioner and Dr. Valenti is "Zhou's recognition of the need for improved efficiency and decreased overhead." Pet. at 22; SAMSUNG-1003 at ¶ 95. The paragraph of Zhou cited by Petitioner and Dr. Valenti, SAMSUNG-1005 at [0005], says nothing about improved efficiency or decreased overhead. Nor do Petitioner and Dr. Valenti explain how the combination of Zhou, Cherian, and Kim lead to improved efficiency or decreased overhead. Indeed, this second factor would have more likely led a POSITA to other simpler solutions, such as the overall MU EDCA timer disclosed in Cherian, rather than the claimed invention in the '035 patent.[6] As a POSITA would have been aware, typically, a simpler solution is more efficient and requires less overhead.

Petitioner and Dr. Valenti argue that "Kim describes specifics of controlling particular transmission modes based on whether acknowledgements are requested." Pet. at 22; SAMSUNG-1003 at ¶ 95.This is unsupported. The evidence cited by Petitioner and Dr. Valenti (SAMSUNG-1004 at [0094], Tables 6-9) only discusses the use of an acknowledgement policy. It says nothing about "controlling particular

[6] Though simpler, the MU EDCA timer in Cherian has other drawbacks that are addressed by the claimed invention of the '035 patent. This issue is, however, outside the scope of this report or the issues raised in the Petition or Dr. Valenti's declaration. Patent Owner reserves the right to later address this issue if necessary.

transmission modes" based on an acknowledgement policy.

The third factor identified by Petitioner and Dr. Valenti is that the combination "would have addressed a known design need for robust wireless networks." Pet. at 23; *see also* SAMSUNG-1003 at ¶ 96 ("a known design need for robust, efficient wireless networks operating within the 802.11 standards"). Petitioner's and Dr. Valenti's argument for this factor is, at the minimum, inadequate. They simply conclude that "incorporating an acknowledgment mechanism … as disclosed by Kim was a logical and necessary set to address the known need for robust communication in wireless LAN systems." SAMSUNG-1003 at ¶ 96; *see also* Pet. at 23. But Petitioner and Dr. Valenti do not explain how such a system leads to more "robust communication," especially in light of the disclosure of Cherian's MU EDCA timer that already provides a known (but not invalidating the '035 patent claims) method for robustly transitioning between MU and legacy parameter sets. Petitioner and Dr. Valenti do not explain why Cherian's (or Zhou's) methods are not sufficiently robust, or how their proposed combination increases robustness.

Petitioner and Dr. Valenti also argue that the use of Kim would have been further motivated by "market pressures." But Petitioner and Dr. Valenti identify no such market pressures. They also argue that the starting of a timer based on an acknowledge policy is one of a "limited number of choices." Pet. at 23; *see also* SAMSUNG-1003 at ¶ 96. This argument about "finite" design choices is discussed

below. In summary, Petitioner's and Dr. Valenti's argument about "limited" or "finite" design choices is not accurate, and it ignores the fact that their arguments require a number of design choices that appear to have been informed by the limitations of the '035 patent rather than another motivation.

Petitioner and Dr. Valenti argue that an acknowledgement policy will "improve the overall reliability and quality of service" of a wireless network. Pet. at 24; *see also* SAMSUNG-1003 at ¶ 97. But that does not explain why a POSITA would have been motivated, without using hindsight, to not only use an acknowledgement policy but to re-design the timers used in Zhou and Cherian to be started based on the acknowledgement policy. Petitioner and Dr. Valenti do not explain how such a change is related to "overall reliability and quality of service" at all.

Finally, the fifth factor identified by Petitioner and Dr. Valenti is "enhanced performance across multiple dimensions of a wireless LAN system." Pet. at 24; *see also* SAMSUNG-1003 at ¶ 98. Petitioner and Dr. Valenti conclude that the combination of Zhou, Cherian, and Kim would have led to a system "not only more efficient in utilizing the wireless medium but also more reliable in delivering data." *Id.* Insufficient explanation is provided for this argument. For example, Petitioner and Dr. Valenti do not explain what drawbacks in wireless medium utilization and delivering data that Zhou, Cherian or Kim have, or why the proposed combination

addresses these problems. Nor does Petitioner or Dr. Valenti explain how the combination of Zhou, Cherian, and Kim "enhances performance" related to a wireless medium or delivering data.

Overall, and based on the foregoing discussion, Petitioner's and Dr. Valenti's arguments are unsupported and do not demonstrate a motivation to combine Zhou, Cherian, and Kim. Haaa Decl. ¶ 75. The "factors" identified by Petitioner and Dr. Valenti would not have motivated a POSITA to make the purported combination suggested by Petitioner and Dr. Valenti. The arguments presented by Petitioner's and Dr. Valenti's in support of motivation to combine seem to be driven by hindsight, seeking claim limitations in the prior art.

Each of the factors rest on generic labels such as improving performance but are not sufficiently or specifically tied to the prior art's disclosures. Further, and given the generic nature of the purported modifications, there is no attempt by Dr. Valenti to avoid hindsight bias in his assertions. Therefore, Petitioner and Dr. Valenti have failed to show how and why a POSITA would have been motivated to combine Zhou, Cherian, and Kim to arrive at the claimed invention of the '035 patent as recited in the claims.

IX. GROUND 2: CLAIMS 4-5 ARE NOT OBVIOUS IN VIEW OF ZHOU, CHERIAN, KIM, AND HO

Petitioner does not argue that Ho resolves any of the issues identified above

with respect to Ground 1. Accordingly, because claims 4 and 5 depend on patentable claim 1, claims 4 and 5 should also be deemed patentable.

X. GROUND 3: CLAIMS 6-7 ARE NOT OBVIOUS IN VIEW OF ZHOU, CHERIAN, KIM, AND BHARGHAVAN

Petitioner does not argue that Bharghavan resolves any of the issues identified above with respect to Ground 1. Accordingly, because claims 6 and 7 depend on patentable claim 1, claims 6 and 7 should also be deemed patentable.

XI. CONCLUSION

Petitioner has failed to show that the combination of Zhou, Cherian and Kim render claims 1 and 8 obvious because they fail to make multiple aspects of the "when" limitations obvious. Because all of the Instituted Claims depend on claim 1 or claim 8, the Board should find that Petitioner has not met its burden to prove that any challenged claim is unpatentable.

Date: February 18, 2026

Respectfully submitted,

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CERTIFICATION REGARDING WORD COUNT

Pursuant to 37 C.F.R. §42.24(d), I certify that there are 8,456 words in the paper excluding the portions exempted under 37 C.F.R. §42.24(a)(1).

Date: February 18, 2026

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CERTIFICATE OF SERVICE

Pursuant to 37 C.F.R. § 42.6(e)(1), I certify that the above document was served on February 18, 2026 by filing this document through the Patent Trial and Appeal Case Tracking System as well as delivering a copy via electronic mail upon the following attorneys of record for the Petitioner:

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