UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

AMPHENOL CORPORATION,

Petitioner,

v.

CREDO TECHNOLOGY GROUP LTD.,

Patent Owner

Case IPR2025-00699
U.S. Patent No. 11,032,111

PATENT OWNER'S REQUEST FOR DISCRETIONARY DENIAL

Amphenol Exhibit 1027
Amphenol v. Credo
IPR2025-00607

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LIST OF EXHIBITS

Ex-2001	Order No. 6: Setting Procedural Schedule, *In the Matter of Certain Active Electrical Cables and Components Thereof*, Inv. No. 337-TA-1446, issued May 19, 2025
Ex-2002	September 1, 2023 Letter re Credo Technology Group, Ltd.'s Intellectual Property
Ex-2003	USPTO, "FAQs for Interim Processes for PTAB Workload Management," *available at* https://www.uspto.gov/patents/ptab/faqs/interim-processes-workload-management
Ex-2004	"Credo Introduces PAM4 DSP for High Performance Data Centers and Enterprise Networks," March 17, 2021, https://credosemi.com/credo-introduces-pam4-dsp-for-high-performance-data-centers-and-enterprise-networks/
Ex-2005	"AEC Applications," https://credosemi.com/products/hiwire-aec/applications/
Ex-2006	"Credo Introduces 800G HiWire ZeroFlap AECs to Support AI Backend Networks," October 10, 2024, *available at* https://s205.q4cdn.com/511065572/files/doc_news/2024/10/credo-introduces-800g-hiwire-zeroflap-aecs-to-support-ai-backend-networks.pdf
Ex-2007	Respondents' Initial Invalidity Contentions, *In the Matter of Certain Active Electrical Cables and Components Thereof*, Inv. No. 337-TA-1446, served June 26, 2025
Ex-2008	Exhibit C-1, 111 Patent Invalidity Chart (Lugthart414), Respondents' Initial Invalidity Contentions, *In the Matter of Certain Active Electrical Cables and Components Thereof*, Inv. No. 337-TA-1446, served June 26, 2025

Ex-2009	Exhibit C-2, 111 Patent Invalidity Chart (Lugthart431), Respondents' Initial Invalidity Contentions, *In the Matter of Certain Active Electrical Cables and Components Thereof*, Inv. No. 337-TA-1446, served June 26, 2025
Ex-2010	Exhibit C-12, 111 Patent Invalidity Chart (Das Sharma, Mezer), Respondents' Initial Invalidity Contentions, *In the Matter of Certain Active Electrical Cables and Components Thereof*, Inv. No. 337-TA-1446, served June 26, 2025
Ex-2011	RESERVED
Ex-2012	RESERVED
Ex-2013	U.S. Pat. No. 10,148,414 ("Lugthart414")
Ex-2014	RESERVED
Ex-2015	RESERVED
Ex-2016	Bert Reiser & Ruthie Wu, Why the International Trade Commission is such an appealing forum for patent disputes," *Reuters* (June 11, 2025), https://www.reuters.com/legal/legalindustry/why-international-trade-commission-is-such-an-appealing-forum-patent-disputes-2025-06-11/
Ex-2017	United States International Trade Commission, Section 337 Statistics: Average Length of Investigations, Updated 4/11/2025, https://www.usitc.gov/intellectual_property/337_statistics_average_length_investigations.htm
Ex-2018	RESERVED
Ex-2019	U.S. Pat. No. 9,337,993 ("Lugthart993")

I. INTRODUCTION

Credo is an American innovator. Its patented technologies power the next generation of energy-efficient data center interconnects. The subject patent of this IPR proceeding—U.S. Pat. No. 11,032,111 ("the '111 patent")—is one of three patents asserted in a pending Section 337 investigation before the International Trade Commission (ITC) (Inv. No. 337-TA-1446). These patents are not abstract ideas or litigation assets; they are the foundation of Credo's HiWire® active electrical cable (AEC) products. The patents were obtained through careful and transparent examination by the Office. Credo is thereby asserting its patents rights after having built real products around this domestic innovation.

The ITC Investigation underscores the stakes associated with these patents and the urgency of their enforcement. Credo is seeking exclusionary relief to protect its core technology from infringement by competitors, including, among others, Petitioner Amphenol. This case is advancing quickly—the ITC has instituted the investigation and is proceeding toward an evidentiary hearing on the merits. Even under the most conservative timeline comparison, the Commission is expected to issue a Final Determination on October 15, 2026, ***before*** the Final Written Decision is expected on November 12, 2026 ("FWD Date"). The ITC will therefore have adjudicated validity of the subject patent before the PTAB reaches the FWD Date, resulting in judicial inefficiency. Meanwhile, the underlying legal

and factual issues before the ITC and the PTAB are the same. The patents are the same. The parties are the same. And the asserted prior art and challenged claims are virtually identical.[1] *Fintiv* therefore supports discretionary denial.

Beyond *Fintiv*, this proceeding presents precisely the situation the Office's leadership envisioned when the Stewart Memo[2] was issued in March 2025. That memo reaffirmed the Acting Director's authority to deny institution not only to prevent inefficient use of the Board's resources, but also to protect the integrity of the patent system as a whole. That integrity depends on the reasonable expectations of patent owners who play by the rules, prosecute diligently, disclose truthfully, and invest in commercialization.

Credo did all of this. It earned its patents under a well-functioning patent examination process before the Office. It also built a domestic industry around the

[1] Amphenol's preliminary invalidity contentions before the ITC include references with different patent numbers, but have near-identical disclosures to references included in its IPR ground (each of which are similarly relied upon by Amphenol for addressing invalidity). *See* §IV.A.4, *infra* (addressing *Fintiv* factor 4).

[2] Memorandum to All PTAB Judges from Coke Morgan Stewart, Acting Secretary of Commerce for Intellectual Property, Regarding the Interim Processes for PTAB Workload Management (March 26, 2025) ("Stewart Memo").

patents. And now, it is using those patents productively in a good-faith enforcement campaign. Amphenol, for its part, is simply recycling the same pool of decade-old prior art—repackaged, recombined, and re-litigated—to gum up the gears of that enforcement effort.

This scenario is not what IPR was designed to enable. And it is what discretionary denial was designed to prevent. The PTAB's resources are not appropriate to adjudicate issues the party seeking review (i.e., petitioner) sought to litigate elsewhere.[3] The PTAB is a component of a balanced and efficient patent system, entrusted with the authority to decline review when institution would undermine—not promote—fairness, efficiency, and technological progress. Institution denial of the subject proceeding under § 314(a) advances these objectives and is necessary to protect the role of the PTAB as a partner in a functional U.S. patent system. Adoption of the bifurcated process reflects a clear policy shift toward protecting patent owner expectations and avoiding duplicative proceedings—precisely the situation presented here.

[3] The issues before the ITC and the PTAB pertaining to the '111 patent are nearly identical (same prior art, claims at-issue). Despite this overlap, Amphenol has not filed a stipulation or otherwise pursued any narrowing. *See* §IV.A.4, *infra* (addressing *Fintiv* factor 4).

II. CREDO'S PATENTED TECHNOLOGY

The application that issued as the '111 patent was filed on August 27, 2019, and issued on June 8, 2021. Credo is the original assignee and owner of the '111 patent. The patent was neither recently-acquired nor dormant. Instead, it arose directly from Credo's own research and development into active electrical cable (AEC) technology, i.e., high-speed Ethernet cables with integrated digital signal-processing electronics.

The '111 patent also protects Credo's AEC products. It embodies critical features of the AEC products that improve cable performance, such as advanced transmitter and receiver equalization, adaptive equalization, and retiming. *See* Ex-1035, 5-12[4] (summarizing the technology and products at issue and the asserted patents).

The '111 patent is critically important to Credo by virtue of its protection of AEC products offered by Credo. These products have led to meaningful commercial uses, such "high-performance serial connectivity solutions for the Hyperscale data center, 5G carrier, enterprise networking, artificial intelligence, and high-performance computing markets." Ex-2004; *see also* Ex-2005 ("The

[4] Unless otherwise indicated, citations to page numbers in this Request refer to page numbers specified in the corresponding document.

demand for cloud computing, instant data streaming, and emerging applications including 5G, AI, and machine learning have pushed Hyperscale, enterprise and edge data centers to accelerate the deployment of 400G and 800G networks").

By 2024, Credo reported "millions of units" of AEC products deployed at tier-1 hyperscaler customers. *See* Ex-2006. The AEC products have won industry awards and play a significant role in modern data center architectures. *Id*. Credo's senior VP of product noted that the company "invented AECs" based on years of engineering and has invested tens of millions of dollars developing this pioneering technology. *Id.* Credo's long-term investment and active marketing underscore how these patents are central to Credo's business, not idle paper patents. Indeed, Credo's overall solutions portfolio explicitly includes AEC cables alongside its semiconductor integrated circuit (IC) products. Protecting these patented AEC innovations is strategically vital for Credo's competitive position in high-speed connectivity.

III. LEGAL STANDARDS

A. Discretionary Denial Under 35 U.S.C. § 314(a)

Instituting or denying a petition under §314(a) "is a matter committed to the Patent Office's discretion." *Cuozzo Speed Techs., LLC v. Lee*, 579 U.S. 261, 273 (2016); *see also Harmonic Inc. v. Avid Tech., Inc.*, 815 F.3d 1356, 1367 (Fed. Cir. 2016) (under §314(a) "the PTO is permitted, but never compelled, to institute an

IPR proceeding"). In *NHK*, the Board used its discretion to deny institution under §314(a) because the parallel district court proceeding was scheduled to end before the FWD deadline and "Petitioner assert[ed] the same prior art and arguments" in that parallel proceeding. *NHK Spring Co Ltd v. Intri Plex Technologies Inc.*, IPR2018-00752, Pap. 8, at 19-20 (Sep. 10, 2019).

Fintiv articulated six factors (*infra* §V.A) to consider in determining whether to exercise discretion to deny institution based on a parallel district court or ITC proceeding. *Apple Inc. v. Fintiv, Inc.*, IPR2020-00019, Pap. 11, at 5-6 (Mar. 20, 2020) ("*Fintiv*"). The factors are evaluated by taking "a holistic view of whether efficiency and integrity of the system are best served by denying or instituting review." *Id.*

The Office has also made clear that "the Board will apply the *Fintiv* factors when there is a parallel proceeding at the International Trade Commission ('ITC')." Boalick Memo, at 2.[5] Further, "the Board is more likely to deny institution where the ITC's projected final determination date is earlier than the Board's deadline to issue a final written decision…" *Id.*

[5] Memorandum, Guidance on USPTO's recission of "Interim Procedure for Discretionary Denials in AIA Post-Grant Proceedings with Parallel District Court Litigation (Mar. 24, 2025), at 2 ("Boalick Memo")

B. Recent USPTO Guidance

The Stewart Memo specified a bifurcated approach for considering discretionary denial, and further identified additional considerations for discretionary denial:

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

As explained below, denial is warranted under 35 U.S.C. § 314(a) based on these additional factors. Credo has developed settled expectations and yet there is no sufficient justification for institution. *See* §IV.B.1, *infra*. Furthermore, Amphenol's contentions in its Petition rely on expert testimony to gap-fill prior art disclosures in addressing limitation [1.f]. *See* §IV.B.2, *infra*. Thus, institution denial is appropriate under these circumstances to "improve PTAB efficiency,

maintain PTAB capacity to conduct AIA proceedings, . . . and promote consistent application of discretionary considerations in the institution of AIA proceedings." Stewart Memo, 3.

IV. DISCRETIONARY FACTORS FAVOR INSTITUTION DENIAL

A. The *Fintiv* Factors Weigh In Favor Of Discretionary Denial

The Petition should be denied institution because (i) at least factors 1-5 support discretionary denial; and (ii) the Petition does not provide a strong meritorious challenge (factor 6).

1. Factor 1—The ITC Investigation Will Not Be Stayed

No stay has been requested in the ITC investigation. And if one were, the stay is unlikely to be granted. Ex-2016, 2 ("discovery proceeds at a more expedited pace in the ALJ setting, and ITC proceedings are **rarely stayed**") (emphasis added). The ITC is under a congressional mandate to conclude its investigations and make determinations "at the earliest practicable time." 19 U.S.C. § 1337(b)(1). The ITC typically does not stay its proceedings based on a pending IPR.

2. Factor 2—The ITC's Projected Final Determination Date Is Earlier Than the FWD Deadline

The projected statutory deadline for issuing a FWD in this proceeding is November 12, 2026 ("FWD Date"). By contrast, the Commission is expected to

issue a Final Determination on October 15, 2026. Thus, the ITC is scheduled to complete its investigation around 19 months after the March 13, 2025 filing date of the ITC complaint. This schedule is more conservative than the ITC's average length of investigations in the past 10 years. *See* Ex-2017 (average length for Fiscal Years 2014 to 2024 never reached 19 months). Further, in the first two quarters of Fiscal Year 2025 ("FY2025"), the average length of Section 337 investigations was 18.04 and 18.2 months, respectively, resulting in an average length of 18.12 months over the first half of 2025. *See* Ex-2017. Based on this average statistic for FY2025, the ITC Investigation would be expected to complete in September 2026—a month earlier than the scheduled completion date.

As such, it is unlikely that the FWD in this proceeding will issue before the ITC completes its investigation. *See Caihong Display Devices Co. Ltd v. Corning, Inc.*, IPR2025-00439, Pap. 18, at 2 (Jul. 10, 2025) ("*Caihong*") (finding that "it is unlikely that a final written decision in this proceeding will issue before the final determination in the ITC investigation" because "the projected final written decision due date for this proceeding is September 10, 2026" and "the target date for completion is August 7, 2026"); *see also* Boalick Memo, 2 ("[I]nstituting an IPR or a PGR where the ITC has set a target date for completing its investigation (i.e., the full Commission's final determination) to occur earlier than the Board's deadline to issue a final written decision in a challenge involving the same patent

claims means that multiple tribunals may be adjudicating validity at the same time, which may increase duplication and expenses for the parties and the tribunals"). *Fintiv* factor 2 therefore weighs in favor of denial. *See Biofrontera Inc. v. Sun Pharmaceutical Industries, Inc.*, IPR2025-00287, Pap. 10 (Jul. 2, 2025) (Director discretionary decision denying institution based on a parallel ITC investigation scheduled to complete before FWD); *see also Ringconn LLC, v. Ouraring, Inc.*, PGR2025-00018, Pap. 11 (Jun. 25, 2025) (same); *see also Ultrahuman Healthcare SP LLC et al. v. Ouraring Inc.*, IPR2025-00411, Pap. 12 (Jun. 25, 2025) (same).

As discussed in §IV.A.4, *infra*, the ITC Investigation also presents overlapping issues with the IPRs, including Amphenol's reliance on substantially the same prior art and arguments. Amphenol has not filed a stipulation or otherwise narrowed its invalidity positions before the ITC in a manner that prevents duplication. Thus, the Commission's early resolution will directly address the asserted ground of unpatentability in this proceeding. If the Board were to proceed, it would not be providing an efficient alternative to litigation but rather a second, duplicative review of issues already adjudicated.

3. Factor 3—Fact Discovery And Expert Reports Will Complete Before A Decision On Institution

Factor 3 weighs in favor of discretionary denial because the parties will have committed significant resources to the ITC Investigation by the time this

proceeding reaches a Decision on Institution (DI), and that investment will only increase materially if the proceeding progresses to a final written decision (by November 2026).

The deadline for issuing the DI is November 12, 2025. By that time, the parties to the ITC Investigation will have already: (i) exchanged proposed claim constructions (July 28, 2025), (ii) completed fact discovery (September 12, 2025), and (iii) exchanged initial expert reports (October 1, 2025) and rebuttal expert reports (October 31, 2025). Indeed, expert discovery will be complete by November 14, 2025—only two days after the expected DI. Ex-2001, 2.

In practical terms, the ITC investigation will be well past the halfway point and approaching expert discovery cut-off by the time the PTAB even considers institution. *Caihong*, at 2 (finding that "there has been meaningful investment" in a parallel ITC investigation because the parties will "have exchanged expert reports" and "complete fact discovery before a decision on institution is due"); *Arashi Visionus LLC v. GoPro Inc.*, IPR2025-00017, Pap. 11, at 11 (Apr. 28, 2025).

If this proceeding is instituted, the parties' investment in the ITC Investigation will only materially increase by the FWD Date. The evidentiary hearing in the ITC Investigation is scheduled to be completed the week of January 20, 2026—over 10 months before the FWD. Ex-2001, 3. Further, an initial

determination in the ITC Investigation is scheduled to issue on June 15, 2026 (roughly five months before FWD) and the target date for completion of the ITC Investigation is October 15, 2026 (roughly a month before FWD). Ex-2001, 2.

4. Factor 4—Complete Overlap Exists Between The Petition And The ITC Investigation And Amphenol Has Not Stipulated Otherwise

Amphenol relies on the same prior art disclosures to address the same claims of the '111 patent (claims 1-19) before the ITC and the PTAB. *Compare* Ex-2007, 296-97, *and* Pet., 2. This overlap is summarized in the table below with respect to prior art that Amphenol applies as primary references in each forum.

Preliminary Invalidity Contentions (ITC)			**IPR Ground (PTAB)**		
Claims	Reference	Exhibit	Claims	Reference	Exhibit
1-19	Lugthart414	Ex-2013	1-19	Lugthart706	Ex-1005
1-4, 6-9, 11, 14-16	Das Sharma	Ex-1006	1-19	Das Sharma	Ex-1006
1, 4, 5, 8, 10-13, 16, 18	Mezer	Ex-1007	1-19	Mezer	Ex-1007

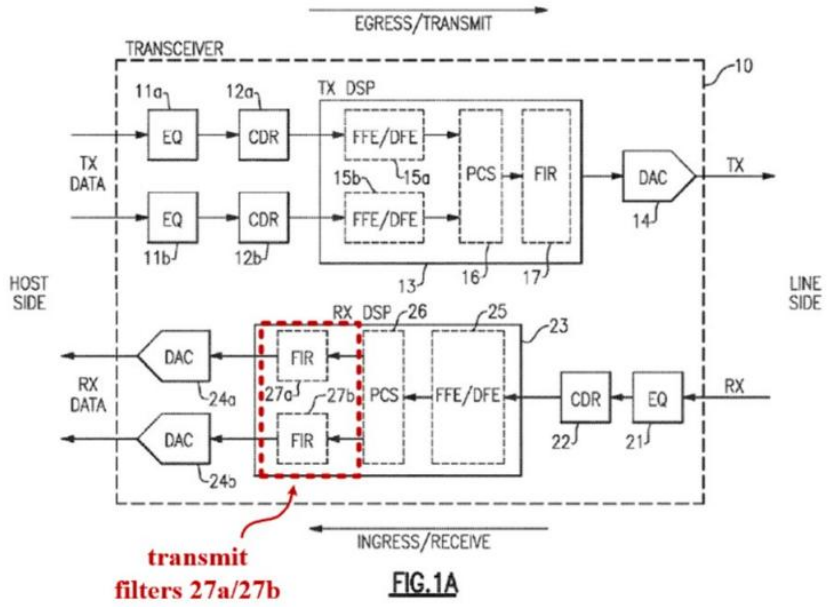
a) Amphenol Applied The Same Disclosure From Near-Identical Lugthart References Before The ITC And The PTAB

Amphenol applied U.S. Pat. No. 10,148,414 (Lugthart414; Ex-2013) in its preliminary invalidity contentions before the ITC, which has nearly-identical disclosures to U.S. Pat. No. 9,882,706 (Lugthart706; Ex-1005) applied in Ground 1 of the Petition.

Lugthart414 and Lugthart706 have near-identical prior art disclosures. Each of their 32 figures are identical (FIGS. 1A-1D, 2A, 2B, 3A-3C, 4A, 4B, 5, 6A, 6B, 7A, 7B, 8, 9A, 9B, 10, 11, 12A, 12B, 13A-13C, 14-16, 17A, 17B, 18). And as to their written description, a side-by-side review confirms no meaningful difference in technical substance. Amphenol's contentions confirm this overlap, since they rely on the ***same disclosures*** found in each reference in addressing key claim limitations. Indeed, in addressing claim 1, Amphenol's invalidity contentions based on Lugthart414 and its IPR ground based on Lugthart706 include the same annotated figure. *Compare* Ex-2008, 2-14, *and* Pet., 39-47. To illustrate, below are excerpts from relevant portions of Amphenol's claim chart based on Lugthart414 (Ex-2008) and its Petition based on Lugthart706 (Ex-1005) addressing limitation [1.a]:

Amphenol's Preliminary Invalidity Contentions Based on Lugthart414 in the ITC

1[a] selecting one of multiple registers to specify initial pre-equalizer coefficient values, each of the multiple registers corresponding to a different channel model;	Lugthart '414 discloses and/or renders obvious this limitation. Lugthart '414 discloses a transceiver that provides "adaptive and configurable signal conditioning features such as… output pre-emphasis." *See, e.g.*, Lugthart '414 at 29:24-29. Lugthart '414 teaches that "pre-emphasis" and "pre-equalization" have the same meaning. Although from the host's perspective DSP 23 is on the "INGRESS/RECEIVE" path, Lugthart's DSP 23—including FIR filters 27a/27b—provides pre-equalization for the signal ("RX DATA") that transceiver 10 transmits to the host transceiver. *See id*. at 9:42-55, Fig. 1A (annotated below).

Claim 1	Lugthart '414
	 FIG.1A Transmit filters 27a/27b condition the line side signal, which they provide to DACs 24a/24b for transmission to the host side. *See id*. at 23:9-19. Lugthart '414 explicitly identifies "transmission line losses on the host side" between the pluggable module transceiver and the host transceiver. *See id*. at 9:14-19. Lugthart '414 explains that FIR filter 17 in the egress/transmit path "perform[s] emphasis on the signal to compensate for channel losses" (*See id*. at 23:67-24:2) and notes that the "DSP 23 in the ingress

Claim 1	Lugthart '414
	path can include componentry that is similar to the DSP 13 in the egress path." *See id*. at 24:8-9; *see also id*. at 24:9-35 (explaining differences between DSP 23's serial-to-parallel conversion and DSP 13's parallel-to-serial conversion, but noting no difference in signal conditioning by the FIR filters). In Lugthart '414's transceiver, equalizer 21 "compensate[s] for transmission line losses on the line side" in the ingress/receive data path (*See id*. at 9:14-16), and Lugthart '414's pluggable module transceiver performs "output pre-emphasis." *See id*. at 29:22-29. Thus, Lugthart '414 describes FIR filters 27a/27b as performing "output pre-emphasis" to compensate for the transmission losses that Lugthart '414 describes on the host side between the pluggable module transceiver and the port transceiver. *See id*. at 29:22-29. To the extent that this claim limitation is not disclosed, either explicitly or inherently, by Lugthart '414, this limitation is obvious to a person of ordinary skill in the art based on (1) Lugthart '414 alone, (2) the knowledge of a person of ordinary skill in the art; and/or (3) the teachings with respect to this claim limitation as detailed in the Cover Pleading and/or other invalidity claim charts. The motivations to modify or combine may come from, for example, the knowledge of the person of ordinary skill themselves, or from known problems and predictable solutions as embodied in these references, examples of which are discussed in the Cover Pleading.

Ex-2008, 2-4 (excerpted)

Amphenol's IPR Ground Based on Lugthart706 in the PTAB

b. Limitation [1.a]

1.a	selecting one of multiple registers to specify initial pre-equalizer coefficient values, each of the multiple registers corresponding to a different channel model;

Lugthart-Das Sharma-Mezer performs "*selecting one of multiple registers to specify initial pre-equalizer coefficient values*." *Supra* §VI.D (describing the combination). Lugthart-Das Sharma-Mezer's transceiver provides "adaptive and configurable signal conditioning features such as… ***output pre-emphasis***." Lugthart-706, 29:23-28. POSAs understood that "pre-emphasis" and "pre-equalization" have the same meaning. Min, [0146]-[0148]; Raghavan, 2:39-41 (describing a "technique for combating ISI [intersymbol interference]… known as 'pre-emphasis', or pre-equalization"); Schmidt, 7:54-55; Zerbe-063, 3:24-27; McCall, 5:4-8.

Although ***from the host's perspective*** DSP 23 is on the "INGRESS/RECEIVE" path, Lugthart-Das Sharma-Mezer's DSP 23—including FIR filters 27a/27b—provides ***pre-equalization*** for the signal ("RX DATA") that

transceiver 10 ***transmits to*** the host transceiver. Lugthart-706, Fig. 1A (annotated below), 9:38-51; Min, [0149].

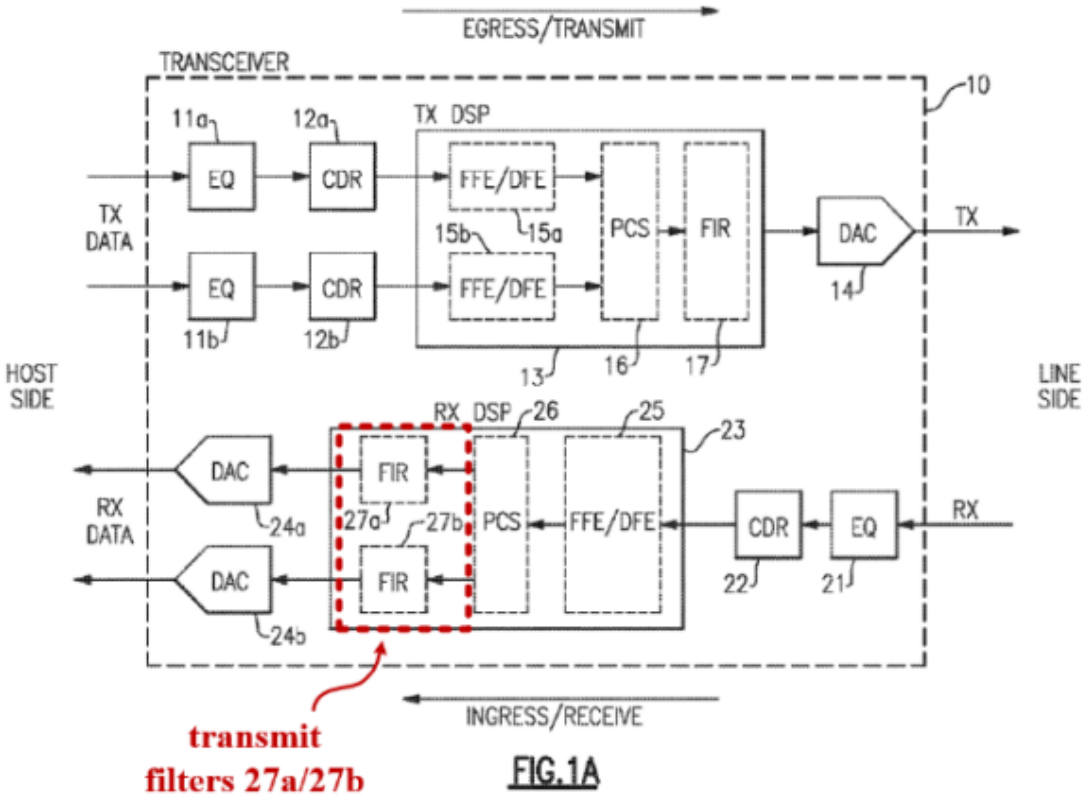


FIG.1A

Transmit filters 27a/27b condition the line side signal, which they provide to DACs 24a/24b for ***transmission to the host side***. Lugthart-706, 23:3-13. Lugthart-706 explicitly identifies "transmission line losses on the host side" between the pluggable module transceiver and the host transceiver. Lugthart-706, 9:10-15; Min, [0150]. Lugthart-706 explains that FIR filter 17 in the egress/transmit path "perform[s] emphasis on the signal to compensate for channel losses" (Lugthart-706, 23:62-64) and notes that the "DSP 23 in the ingress path can include componentry that is similar to the DSP 13 in the egress path." *Id.*, 24:3-4;

see also id., 24:3-29 (explaining differences between DSP 23's serial-to-parallel conversion and DSP 13's parallel-to-serial conversion, but noting no difference in signal conditioning by the FIR filters); Min, [0150].

In Lugthart-706's transceiver, equalizer 21 "compensate[s] for transmission line losses on the line side" in the ingress/receive data path (Lugthart-706, 9:10-12), and Lugthart-706's pluggable module transceiver performs "***output pre-emphasis***." Lugthart-706, 29:21-28; Min, [0151]. Thus, POSAs understood that Lugthart-706 describes FIR filters 27a/27b as performing "output pre-emphasis" to compensate for the transmission losses that Lugthart-706 describes on the host side between the pluggable module transceiver and the port transceiver. Lugthart, 29:21-28; Min, [0151].

Pet., 40-42

As shown above, in addressing limitation [1.a], Amphenol relies on the same (1) identical annotated figure from Lugthart414 and Lugthart706 (Figure 1A), (2) the same prior art disclosures (e.g., Lugthart414, 9:14-19, 9:42-55, 23:9-19, 29:22-29; Lugthart706, 9:10-12, 9:38-51, 23:3-13, 29:21-28), and (3) the same disclosed elements (e.g., transmit filters 27a/27b) within that disclosure. Examples of one of the cited portions of Lugthart414 and Lugthart706 are reproduced below:

The receive path DSP **23** can be used to process the data recovered by the receive path CDR circuit **22**, and the transmit path DSP **13** can be used to process the data recovered by the first and second transmit path CDR circuits **12***a*, **12***b*. In the illustrated configuration, the receive path DSP **23** includes a feed-forward equalizer and/or decision feedback equalizer (FFE/DFE) block **25**, a physical coding sublayer (PCS) block **26**, a first finite impulse response (FIR) filter **27***a*, and a second FIR filter **27***b*. Additionally, the transmit path DSP **13** includes a first FFE/DFE block **15***a*, a second FFE/DFE block **15***b*, a PCS block **16**, and a FIR filter **17**. Although one example of DSP blocks for receive path and transmit path DSPs has been provided, other configurations are possible.

The receive path DSP **23** can be used to process the data recovered by the receive path CDR circuit **22**, and the transmit path DSP **13** can be used to process the data recovered by the first and second transmit path CDR circuits **12***a*, **12***b*. In the illustrated configuration, the receive path DSP **23** includes a feed-forward equalizer and/or decision feedback equalizer (FFE/DFE) block **25**, a physical coding sublayer (PCS) block **26**, a first finite impulse response (FIR) filter **27***a*, and a second FIR filter **27***b*. Additionally, the transmit path DSP **13** includes a first FFE/DFE block **15***a*, a second FFE/DFE block **15***b*, a PCS block **16**, and a FIR filter **17**. Although one example of DSP blocks for receive path and transmit path DSPs has been provided, other configurations are possible.

Ex-1005 (Lugthart706), 9:38-51 (left); Ex-2013 (Lugthart414), 9:42-55 (right)

Amphenol's strategy reflects a deliberate attempt to use prior art references with different patent numbers to avoid discretionary denial.

b) Amphenol Applied The Same Disclosure From Das Sharma (Ex-1006) Before The ITC And The PTAB

Amphenol relied upon the same Das Sharma reference (U.S. Pat. App. Pub. No. 2014/0281067) before the ITC and the PTAB. *See* Ex-2010 (Exhibit C-12 to Amphenol's preliminary invalidity contentions, with invalidity contentions with respect to Das Sharma), 73-74; Pet., 42-45 (analysis of Limitation [1.a] based on Lugthart706+Das Sharma+Mezer).

The overlap is further confirmed by Amphenol's reliance on the same prior art disclosure from Das Sharma in its invalidity positions in each forum. In addressing limitation [1.a], Amphenol's invalidity contentions and its IPR ground each rely on paragraphs [0066], [0075], [0078], [0085], [0106], [0155], and Figure 15 of Das Sharma. *Compare* Ex-2010, 73-74, *and* Pet., 42-45. To illustrate, below are excerpts from relevant portions of Amphenol's claim chart based on Das

Sharma (Ex-2010) and its Petition based on Das Sharma addressing limitation [1.a]:

Amphenol's Preliminary Invalidity Contentions Based on Das Sharma in the ITC

	U.S. Patent Publication No. 2014/0281067 ("Das Sharma") It was well-known that equalization can be performed on the transmitter side (i.e., pre-equalization) and/or on the receiver side and it was a design choice where to perform equalization. *See, e.g.*, Das Sharma at [0085]. An ordinarily skilled artisan would use pre-equalization in a cable to ensure good cable performance irrespective of the host device with which the cable is used. *See, e.g.*, OIF-CEI-04.0, § 16.2.2 ("16.2.2 Transmitter equalizer function: Both host and module Tx FIRs are likely to be required to meet … eye requirements … for high loss channels."). A transceiver's pre-emphasis coefficients can be adjusted during a training phase. *See, e.g.*, Das Sharma at [0066], [0075]). A set of coefficients adjusted during the training phase are applied to FIR filters in the transceiver. *See id. at* [0079] (FIR filter uses adjusted coefficients). The "set of default coefficients located within registers" in the pluggable module transceiver. *See id*. at [0078], [0106]. The '111 Patent says that each channel model is provided based on assumptions of known or predicted link characteristics and that each channel model stores "default coefficient values" provided by the "the manufacturer of the pluggable module." *See, e.g.*, '111 Patent at 12:1-4, 12:54-13:8. That is precisely

Claim 1	Disclosure
	what the different sets of default coefficients for different channel types are. *See, e.g.*, Das Sharma at [0078] (describing default coefficients "provided by manufacturer"). The set of default coefficients that correspond to a channel having the parameters detected during the basic channel test, or the best performing set of coefficients, is *selected* and requested "from the configuration registers." *See, e.g.*, Das Sharma at [0155], Fig. 15.

Ex-2010, 73-74

Amphenol's IPR Ground Based on Das Sharma in the PTAB

To the extent Lugthart-706 is considered to not expressly disclose that FIR filters 27 in RX DSP 23 provide ***pre***-equalization to compensate for transmission losses on the host side, that would have been a conventional and obvious way to implement what Lugthart-706 discloses. Min, [0152]. It was well-known that equalization can be performed on the transmitter side (i.e., pre-equalization) and/or on the receiver side and it was a design choice where to perform equalization. Das Sharma, [0085]; Mezer, 5:41-55; Hsu, 1:9-12, 2:1-7; Min, [0152]. A provider of an active cable like Lugthart-706's had reasons to implement pre-equalization in the cable because this would ensure good cable performance irrespective of the

Pet., 42 (annotated)

FIR filters 27a/27b use "***tap coefficients***" to control the output pre-emphasis functionality. Lugthart-706, 22:13-17, 23:21-23; Min, [0153]. In Lugthart-Das Sharma-Mezer, the transceiver's pre-emphasis coefficients are adjusted during a training phase as taught by both Lugthart-706 (48:65-49:37) and Das Sharma ([0066], [0075]). *Supra* §VI.D (describing the combination); Min, [0153]. The set of coefficients adjusted during the training phase are applied to FIR filters 27a/27b in the RX DSP's transceiver. *Supra* §VI.D (describing the combination); Min, [0153]; Das Sharma, [0079] (FIR filter uses adjusted coefficients).

Lugthart-Das Sharma-Mezer stores "a set of default coefficients located within registers" in the pluggable module transceiver as taught by Das Sharma, [0078], [0106]. *Supra* §VI.D (describing the combination). In Lugthart-Das Sharma-Mezer, "various types of channels may be tested in advance to determine suitable [pre-equalizer] characteristics therefor, and when it is determined to which one of the channel types the computer system is coupled, ***the suitable*** [pre-equalizer] ***characteristic for that type of channel may be selected***" as taught by Mezer. Min, [0153]-[0154]; Mezer, 6:53-57; *supra* §VI.D (describing the combination) and Mezer 3:33-4:42 (describing the process for pre-computing the

Pet., 43 (annotated)

When the Lugthart-Das Sharma-Mezer active cable system is plugged into a host device, either (1) a channel test determines parameters of the channel between the cable's transceiver and the host's transceiver, or (2) a training signal is sent using each set of coefficients, and the best performing set is determined. *Supra* §VI.D (describing the combination); Lugthart-706, 48:20-22; Min, [0156]. The set of default coefficients that correspond to a channel having the parameters detected during the basic channel test, or the best performing set of coefficients, is *selected* and requested "from the configuration registers" (Das Sharma, [0155], Fig. 15) and then applied to the pre-emphasis FIR filters 27a/27b. *Supra* §VI.D (describing the combination); Min, [0156].

Pet., 45 (annotated)

c) Amphenol Applied The Same Disclosure From Mezer (Ex-1007) Before The ITC And The PTAB

Amphenol relied upon the same Mezer reference (U.S. Pat. No. 7,239,665) before the ITC and the PTAB. *See* Ex-2010 (Exhibit C-12 to Amphenol's preliminary invalidity contentions, with invalidity contentions with respect to Mezer), 74; Pet., 42-44 (analysis of Limitation [1.a] based on Lugthart706+Das Sharma+Mezer).

The overlap is further confirmed by Amphenol's reliance on the same prior art disclosure from Mezer in its invalidity positions in each forum. In addressing claim 1, Amphenol's invalidity contentions based on Mezer and its IPR ground based on Mezer include the same key disclosures. *Compare* Ex-2010, 74, *and* Pet., 42-44. To illustrate, below are excerpts from relevant portions of Amphenol's

claim chart based on Mezer (Ex-2010) and its Petition based on Mezer addressing claim 1:

Amphenol's Preliminary Invalidity Contentions Based on Mezer in the ITC

	United States Patent No. 7,239,665 ("Mezer") Mezer discloses that equalization can be performed on the transmitter side (i.e., pre-equalization) and/or on the receiver side, and it was a design choice where to perform equalization. *See, e.g.*, Mezer at 5:41-55. Pre-equalization in the cable ensures good cable performance irrespective of the host device with which the cable is used. *See, e.g.*, OIF-CEI-04.0, § 16.2.2 ("16.2.2 Transmitter equalizer function: Both host and module Tx FIRs are likely to be required to meet… eye requirements… for high loss channels."). Mezer discloses that "various types of channels may be tested in advance to determine suitable [pre-equalizer] characteristics therefor, and when it is determined to which one of the channel types the computer system is coupled, the suitable [pre-equalizer] characteristic for that type of channel may be selected." *See, e.g.*, Mezer, 6:53-57; *see also id*. at 3:33-4:42 (describing the process for pre-computing the sets of coefficients), 4:24-26 (teaching "selecting one of the pre-computed equalizer characteristics" (i.e., sets of coefficients) "stored in the storage unit"), and 4:32-39 (describing a "lookup table" used "to select one of the pre-computed equalizer characteristics stored in the storage unit").

Ex-2010, 74

Amphenol's IPR Ground Based on Mezer in the PTAB

To the extent Lugthart-706 is considered to not expressly disclose that FIR filters 27 in RX DSP 23 provide ***pre***-equalization to compensate for transmission losses on the host side, that would have been a conventional and obvious way to implement what Lugthart-706 discloses. Min, [0152]. It was well-known that equalization can be performed on the transmitter side (i.e., pre-equalization) and/or on the receiver side and it was a design choice where to perform equalization. Das Sharma, [0085]; Mezer, 5:41-55; Hsu, 1:9-12, 2:1-7; Min, [0152]. A provider of an active cable like Lugthart-706's had reasons to implement pre-equalization in the cable because this would ensure good cable performance irrespective of the

Pet., 42 (annotated)

Lugthart-Das Sharma-Mezer stores "a set of default coefficients located within registers" in the pluggable module transceiver as taught by Das Sharma, [0078], [0106]. *Supra* §VI.D (describing the combination). In Lugthart-Das Sharma-Mezer, "various types of channels may be tested in advance to determine suitable [pre-equalizer] characteristics therefor, and when it is determined to which one of the channel types the computer system is coupled, ***the suitable*** [pre-equalizer] ***characteristic for that type of channel may be selected***" as taught by Mezer. Min, [0153]-[0154]; Mezer, 6:53-57; *supra* §VI.D (describing the combination) and Mezer 3:33-4:42 (describing the process for pre-computing the sets of coefficients), 4:24-26 (teaching "***selecting*** one of the pre-computed equalizer characteristics" (*i.e.,* sets of coefficients) "stored in the storage unit"), and 4:32-39 (describing a "***lookup table***" used "to select one of the pre-computed equalizer characteristics stored in the storage unit"). A POSA would have stored each coefficient set corresponding to a different channel model in a different register, so that on selecting the desired coefficient set they can be accessed by simply selecting the corresponding register. Min, [0154]. The pre-computed pre-equalizer coefficients stored in registers in Lugthart-Das Sharma-Mezer are *initial pre-equalizer coefficient values*. Min, [0154].

Pet., 43-44 (annotated)

d) Amphenol Has Not Narrowed Issues Between the PTAB And the ITC

As explained above, Amphenol's invalidity theories in the ITC and the PTAB are identical. This results in inefficient use of judicial resources in each.

And yet, Amphenol has taken no action to reduce this overlap. As of the filing of this request, Amphenol has not filed any stipulation with the ITC or otherwise narrowed the issues. *Fintiv* factor 4 therefore weighs in favor of discretionary denial.

Any effort by Amphenol to later narrow the issues would also be ineffective. The single IPR ground in the Petition applies prior art that is included in Amphenol's invalidity contentions (Lugthart706, Das Sharma, Mezer). This duplication makes Amphenol's IPR ground distinguishable from those implicated in *Samsung*, where institution was granted with a parallel ITC investigation. *See Samsung Electronics Co Ltd v. SiOnyx LLC*, IPR2024-01431, Pap. 21, at 14-16 (Apr. 10, 2025) ("*Samsung*"). There, institution was premised on the petitioner's withdrawal of specific IPR grounds raised before the ITC, thereby removing all overlap with the ITC Investigation. *Id*., 14-15. In other words, in *Samsung*, institution was premised on the petitioner avoiding overlap by withdrawing IPR grounds from consideration by the ITC.

Finally, any stipulation subsequently submitted by Amphenol should be deemed late. The Office has made clear that timely filing of a stipulation for consideration in discretionary denial briefing is one month from the Notice of Filing Date Accorded (NOFDA). In this instance, the NOFDA issued on May 12, 2025, which resulted in a stipulation deadline on June 12, 2025. Amphenol failed

to file any stipulation by that date. Based on recent USPTO guidance, a stipulation should be filed "as soon as practicable, so that a patent owner may address the impact of the stipulation." Ex-2003, 5. Amphenol chose not to pursue any stipulation as of the filing date of this request, foreclosing the opportunity for Credo to assess the impact on discretionary denial.

5. Factor 5—Parties Involved In This IPR And The ITC Investigation Overlap

Factor 5 weighs in favor of denying institution because the parties in the parallel litigation are the same. *See* Pet., x-xi; *Fintiv II*, 15 ("Because the petitioner and the defendant in the parallel proceeding are the same party, this factor weighs in favor of discretionary denial.").

6. Factor 6—The Petition Fails To Demonstrate That One Or More of the Claims Are Unpatentable

Factor 6 weighs in favor of denying institution because the merits of the Petition are weak. As will be explained in Patent Owner's Preliminary Response (POPR),[6] the Petition fails to establish that the challenged claims would have been

[6] Credo asks the Acting Director to consider the merits briefing presented in the POPR when considering *Fintiv* factor 6. *See* Ex-2003, 7 ("when filing a brief for

obvious over the Lugthart706+Das Sharma+Mezer combination. Weak merits are further demonstrated by Amphenol's over-reliance on expert testimony (*see* §IV.B.2, *infra*), which establishes a distinct basis for discretionary denial.

B. Additional Factors Set Forth In The Stewart Memo Support Discretionary Denial

1. *Settled Expectations And Patent Maturity Further Reinforce Discretionary Denial*

While "there is no bright-line rule on when settled expectations become settled, in general, the longer the patent has been in force, the more settled expectations should be." *Dabico Airport Solutions Inc v. HydraFacial LLC et al.*, IPR2025-00408, Pap. 21, at 3 (Jun. 18, 2025). Here, Credo has invested in, relied on, and commercialized the challenged patents for half a decade—destabilizing them now undercuts the certainty that the patent system is meant to foster. The challenged patents have been enforced and licensed as part of a publicly disclosed patent portfolio. *See* Ex-1035. As noted in §II, *supra*, claimed inventions in the '111 patent protect Credo's AEC products, which are relied upon by (a) customers, including major data center operators, and (b) domestic industry partners. *See* Ex-2004; Ex-2005; Ex-2006. The claims have also been unchallenged for almost four

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discretionary denial, a patent owner may direct attention to an anticipated POPR and evidence for a discussion of the merits").

years, indicating market acceptance and long-term reliance.

Further, Amphenol's prior knowledge of the '111 patent, coupled with a failure to seek early review, is an independent ground for discretionary denial under §314(a). *See, e.g.*, *iRhythm Inc et al. v. Welch Allyn Inc.*, IPR2025-00363, Pap. 10, at 2-3 (Jun. 6, 2025) ("*iRhythm*") (finding that "settled expectations favor denial of institution" because of "Petitioner's awareness of Patent Owner's applications and failure to seek early review of the patents").

Here, Amphenol was made aware of the '111 patent on September 1, 2023—more than a year prior to filing its Petition in April 2025. *See* Ex-2002. This lengthy delay undermines any claim of prejudice and strongly supports the denial of institution based on Credo's "settled expectations." In *iRhythm*, "discretionary denial of institution [was] appropriate" because Patent Owner's settled expectations were found to outweigh "[s]everal arguments weigh[ing] against discretionary denial, e.g., "that a final written decision [in the PTAB] proceeding will issue before the district court trial" (*Fintiv* factor 2), "little investment by the parties in the district court proceeding" (*Fintiv* factor 3), and "a high likelihood of a stay if an *inter partes* review is instituted" (*Fintiv* factor 1). *iRhythm*, at 1. As explained in §IV.A, *supra*, the *Fintiv* factors are even more favorable such that there is no indication that Credo's settled expectations are outweighed.

Further, Amphenol has not demonstrated why institution is justified. There is no persuasive reason the Board should now review the challenged claims of the '111 patent. As discussed in §II, *infra*, this is not an instance where "a patent may have been in force for years but may not have been commercialized, asserted, marked, licensed, or otherwise applied in a petitioner's particular technology space, if at all." *Zepp Health Corp v. Slyde Analytics LLC*, IPR2025-00327, Pap. 12, 2-3 (Jun. 26, 2025). To the contrary, Credo expressly marked its rights and asserted the '111 patent by providing Amphenol with actual notice of its infringement in September 2023. *See* Ex-2002. There is also no "significant change in law … since the patent issued" and, thus, Amphenol cannot show "how [a] change in law directly bears on the patentability of the challenged claims." *Id.* Thus, based on the absence of this information, the Office should be "disinclined to disturb" the settled expectations that Credo has developed for the '111 patent. *Id.*, 3.

Finally, the '111 patent also supports technology that helps decarbonize U.S. infrastructure by reducing energy consumption. Weakening this patent through the PTAB, as pursued by Amphenol, serves no public purpose. *See* Ex-1001, 1:19-35. They also enable lower-power, lower-cost data centers (energy efficiency is a national priority). Credo is a U.S.-based innovator asserting its patent rights. The ITC proceeding already promotes national trade policy and patent enforcement.

2. *Amphenol's Contentions For Limitation [1.a] Rely On Expert Testimony To Fill Gaps in Third Party Evidence*

Amphenol's IPR ground against claim 1 (Ground 1) relies on Das Sharma and Mezer to address limitation [1.a] of claim 1. *See* Pet., 40-45. And yet, Amphenol's contentions with respect to the relied-upon portions of these references in relation to limitation [1.a] (specifically, "multiple registers corresponding to a different channel model" and selection of a register "to specify initial pre-equalizer coefficient value") reveals reliance on expert testimony to gap-fill prior art disclosures. Indeed, as will be explained in the POPR, Das Sharma and Mezer each fail to disclose or suggest limitation [1.a], rendering Amphenol's contentions substantively defective (beyond the type of expert testimony reliance that separately warrants institution denial).

More specifically, Amphenol effectively concedes the primary reference (Lugthart706) lacks express or inherent disclosure to satisfy the "multiple registers corresponding to a different channel model" recited in the limitation [1.a]. *See* Pet., 43-44. Amphenol is therefore forced to rely on a hypothetical configuration outside Lugthart706's disclosure that, in its view, "would have stored each coefficient set corresponding to a different channel model in a different register." Pet., 44 (citing Ex-1003, ¶154). Amphenol then purports that this hypothetical configuration satisfies limitation [1.a] because, according to Amphenol, this would

have resulted in "selecting the desired coefficient set they can be accessed by simply selecting the corresponding register." *Id*.

In other words, in attempting to address the elements recited in [1.a] (including "multiple registers corresponding to a different channel model"), Amphenol's contentions fill gaps in the prior art by relying on expert testimony to combine functionality described in Lugthart706, Das Sharma, and Mezer. *Id*. This amounts to over-reliance because (1) Amphenol's contentions fail to explain why "[a] POSA would have stored each coefficient set corresponding to a different channel model in a different register" (Pet., 44), (2) the relied-upon disclosures from Das Sharma and Mezer for limitation [1.a] (Das Sharma, [0078], [0106]; Mezer, 3:33-4:42, 4:24-26, 4:32-39, 6:53-57) do not unambiguously disclose or suggest such a configuration, and (3) the corresponding testimony from a declaration from Dr. Min ("Min Declaration") merely parrots the arguments included in the Petition. As will be explained in greater detail in the POPR, this reliance is also substantively defective since neither the Petition nor the Min Declaration sufficiently address how a POSITA would have relied upon the disclosures of third-party evidence (e.g., Lugthart706, Das Sharma, Mezer) to arrive at the hypothetical configuration that Amphenol's contentions require to achieve satisfaction of limitation [1.a].

Below is a chart showing a comparison of Amphenol's contentions with

respect to the "multiple registers corresponding to a different channel model" recited in limitation [1.a] and declaration testimony from Dr. Min cited for evidentiary support:

Amphenol's Contentions (Pet., 43-44)	**Cited Testimony From Min Declaration (Ex-1003, ¶154)**
Lugthart-Das Sharma-Mezer stores "a set of default coefficients located within registers" in the pluggable module transceiver as taught by Das Sharma, [0078], [0106]. *Supra* §VI.D (describing the combination). In Lugthart-Das Sharma-Mezer, "various types of channels may be tested in advance to determine suitable [pre-equalizer] characteristics therefor, and when it is determined to which one of the channel types the computer system is coupled, ***the suitable*** [pre-equalizer] ***characteristic for that type of channel may be selected***" as taught by Mezer. Min, [0153]-[0154]; Mezer, 6:53-57; *supra* §VI.D (describing the combination) and Mezer 3:33-4:42 (describing the process for pre-computing the sets of coefficients), 4:24-26 (teaching "***selecting*** one of the pre-computed equalizer characteristics" (*i.e.,* sets of coefficients) "stored in the storage unit"), and 4:32-39 (describing a "***lookup table***" used "to select one of the pre-computed equalizer characteristics stored in the storage unit"). A POSA would have stored each coefficient set corresponding to a different channel model in a different register, so that on selecting the desired coefficient set they can be accessed by simply selecting the corresponding register. Min, [0154]. The pre-computed pre-equalizer coefficients stored in registers in Lugthart-Das Sharma-Mezer are *initial pre-equalizer coefficient values*. Min, [0154].	154. Lugthart-Das Sharma-Mezer stores "a set of default coefficients located within registers" in the pluggable module transceiver as taught by Das Sharma, [0078], [0106]. *See supra* §VI.D. In Lugthart-Das Sharma-Mezer, "various types of channels may be tested in advance to determine suitable FFE [equalizer] characteristics therefor, and when it is determined to which one of the channel types the computer system is coupled, ***the suitable FFE characteristic for that type of channel may be selected***" as taught by Mezer. Mezer, 6:53-57; *see also supra* §VI.D and Mezer 3:33-4:42 (describing the process for pre-computing the sets of coefficients), 4:24-26 (teaching "***selecting*** one of the pre-computed equalizer characteristics" (*i.e.,* sets of coefficients) "stored in the storage unit," and 4:32-39 (describing a "***lookup table***" used "to select one of the pre-computed equalizer characteristics stored in the storage unit 80"). A POSA would have stored each set of coefficients corresponding to a different channel model in a different register so that once the desired set of coefficients is selected, they can be accessed by simply selecting the corresponding register. The pre-computed pre-equalizer coefficients stored in registers in Lugthart-Das Sharma-Mezer are *initial pre-equalizer coefficient values*.

As shown above, the Petition cites to Das Sharma (e.g., [0078], [0106]) and Mezer (e.g., 3:33-4:42, 4:24-26, 4:32-39, 6:53-57), but relies exclusively on testimony from the Min Declaration. The cited testimony also parrots the contentions in the Petition. For instance, like the Petition, paragraph 154 of the Min Declaration provides a conclusory allegation that the hypothetical configuration of Lugthart706 required to satisfy the "multiple registers

corresponding to a different channel model" of limitation [1.a] would have "stored each set of coefficients corresponding to a different channel model in a different register so that once the desired set of coefficients is selected." Ex-1003, ¶154.

To the extent that Amphenol argues its contentions for [1.a] incorporate-by-reference prior analysis regarding the proposed Lugthart706+Das Sharma+Mezer combination in Section VI.D of the Petition, its position still demands reliance on expert testimony. In that section of the Petition (Pet., 26-32), Amphenol contends "POSAs understood that Mezer's teachings apply directly to Lugthart-706's pre-equalization process (as modified by Das Sharma . . .)" Pet., 28.

That is, Amphenol's reliance on the Lugthart706+Das Sharma combination to address limitation [1.a] ***requires*** Mezer to have disclosed "storing different initial pre-equalization coefficient values for different channel models." Pet., 26. But, as will be explained in greater detail in the POPR, none of the relied-upon disclosures from Mezer cited in pages 26-28 of the Petition for this concept (e.g., 3:33-4:42, 5:25-55, 6:53-7:3, 7:11-15) support this proposition. And, because of the lack of this apparent disclosure, Amphenol's application of the Lugthart706+Das Sharma+Mezer combination to limitation [1.a] necessarily requires reliance on expert testimony. And yet, the testimony cited in pages 26-28 of the Petition (i.e., paragraphs 114-119 of the Min Declaration) fails to substantiate key assertions, and in any event, largely parrots the analysis in the

Petition.

V. CONCLUSION

For the reasons set forth above, Credo requests discretionary denial of the Petition.

Respectfully submitted,

Date: July 14, 2025

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CERTIFICATION UNDER 37 CFR § 42.24(d)

Under the provisions of 37 CFR § 42.24, the undersigned hereby certifies that the word count for the foregoing Patent Owner's Request for Discretionary Denial totals 5,020, which is less than the 14,000 limit.

Respectfully submitted,

Date: July 14, 2025

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CERTIFICATE OF SERVICE

Pursuant to 37 C.F.R. § 42.6(e)(4), the undersigned certifies that on July 14, 2025, a complete and entire copy of this Patent Owner's Request for Discretionary Denial and all supporting exhibits were provided via email, to the Petitioner, by serving the correspondence address of record as follows:

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