

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

AMPHENOL CORPORATION,
Petitioner,

v.

CREDO TECHNOLOGY GROUP LTD.,
Patent Owner.

Case No. IPR2025-00607
Patent No. 11,495,898

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

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Exhibit	Description
1001	U.S. Patent No. 11,495,898 (“the ’898 patent”)
1002	Prosecution History of U.S. Patent No. 11,495,898
1003	Declaration of Dr. Shukri Sourì (“Sourì”)
1004	Curriculum Vitae of Dr. Shukri Sourì
1005	U.S. Patent Application Publication No. 2020/0194911 (“Ayzenberg”)
1006	U.S. Patent Application Publication No. 2013/0280955 (“Alden”)
1007	U.S. Patent No. 9,882,706 (“Lugthart”)
1008	Andy Turudic, et al., <i>Pre-Emphasis and Equalization Parameter Optimization with Fast, Worst-Case/Multibillion-Bit Verification</i> (DesignCon 2007) (“Turudic”)
1009	U.S. Patent No. 9,887,496 (“Janssen”)
1010	QSFP-DD Hardware Rev 5.0 (Jul. 9, 2019)
1011	Pages from Newton’s Telecom Dictionary (30 th ed. 2016)
1012	Pages from R. Horak, <i>Webster’s New World Telecom Dictionary</i> (2008)
1013	’898 Patent Claim Limitation Comparison Chart
1014	U.S. Patent No. 11,228,123 (“Ayzenberg-123”)
1015	U.S. Provisional Patent Application No. 62/780,504
1016	Ayzenberg Claim Limitation Comparison Chart
1017	TE connectivity, <i>QSFP-DD Connectors & Cable Assemblies: High Speed 400G Pluggable I/O Solutions</i> (2019)
1018	U.S. Patent No. 7,498,523

Exhibit	Description
1019	Redline Comparison of Ayzenberg (EX1005) Specification to EX1015 Specification
1020	Griffiths, D.J., INTRODUCTION TO ELECTRODYNAMICS (4th ed. 2013).
1021	Email chain between Amphenol and Credo October-December 2023
1022	Letter from Amphenol to Credo October 2024
1023	<i>In re Certain Active Electrical Cables and Components Thereof</i> , Inv. No. 337-TA-3814, Complaint (Mar. 13, 2025).
1024	EX2004 from IPR2025-00699 filed with Credo’s discretionary denial request
1025	EX2005 from IPR2025-00699 filed with Credo’s discretionary denial request
1026	EX2006 from IPR2025-00699 filed with Credo’s discretionary denial request
1027	Credo’s Request for Discretionary Denial in IPR2025-00699
1028	English Translation of “The nth notice of examination opinions” in CN202010149136.4 (Apr. 19, 2023), available at: https://globaldossier.uspto.gov/details/CN/202010149136/A/80824)
1029	Certified English Translation of “Deemed withdrawal notice” in CN202010149136.4 (Aug. 10, 2023), original available at: https://globaldossier.uspto.gov/details/CN/202010149136/A/80824
1030-1055	Reserved
1056	PTAB Alphabetical Listing of Precedential Decisions, available at https://www.uspto.gov/patents/ptab/decisions-and-opinions/precedential
1057	Executive Order 14179, “Removing Barriers to American Leadership in Artificial Intelligence” (Jan. 23, 2025)

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1058	Brad Plumer, “Trump Hails \$90 Billion in A.I. Infrastructure Investments at Pennsylvania Summit,” <i>New York Times</i> (Jul. 15, 2025)
1059	Office Management and Budget (OMB) Memorandum M-25-21 “Accelerating Federal Use of AI through Innovation, Governance, and Public Trust” (Apr. 3, 2025)
1060	Statement from U.S. Secretary of Commerce Howard Lutnick (Jun. 3, 2025)
1061	Arancibia, Juan Carlos, Networker Emerges as Key Player in AI, <i>Investor’s Business Daily</i> , Vol. 42, No. 11 (week of Jun. 16, 2025)
1062	Credo News Release, “Credo Showcasing AEC PCIe Products for AI Scaling at NVIDIA GTC 2025” (Mar. 12, 2025)
1063	Credo Blog, “Active Electrical Cables (AEC) Becoming an Important Part of Data Center Architectures” available at https://credosemi.com/blog/ (Feb. 27, 2020)
1064	Memorandum to All PTAB Judges on Interim Processes from Coke Morgan Stewart (Mar. 26, 2025)

Patent Owner Credo's request for discretionary denial (Paper 6, "Request") is baseless. Multiple factors weigh decisively against discretionary denial and justify using the Board's resources to decide the Petition on the merits. The Request should be denied.

I. INTRODUCTION

U.S Patent No. 11,495,898 ("898 Patent") only recently issued on November 8, 2022. EX1001, code(45). Credo used the '898 Patent in an attempt to threaten Petitioner ("Amphenol"). EX2005. According to Credo, the '898 Patent is one of eleven Credo patents that "protect[]" its active electrical cable (AEC) products and that Amphenol may "unlawful[ly] infringe[]." EX2005, 1-2. AECs include signal processing circuitry that improves the cable's performance when installed in a data center. AECs are key infrastructure components and enabling technology for artificial intelligence (AI) data centers.

Credo argues that discretionary denial is warranted because there is allegedly no dispute between the parties involving the '898 Patent. Request, 2, 4-7. Credo alleges that this shows that Amphenol could only have brought this challenge as "retaliation" for Credo suing Amphenol on other patents "directed to different technology" which is a "misuse of the IPR process." *Id.*, 2, 4. Credo badly misrepresents the facts.

Credo’s assertion that there is no “dispute” about the ’898 Patent is false.

Id., 2. Credo alleged that Amphenol may “unlawful[ly] infringe[.]” the ’898 Patent. EX2005, 2. Credo has never retracted that assertion. If Credo were serious about demonstrating that there is no dispute about the ’898 Patent, Credo could have granted Amphenol a covenant not to sue on the ’898 Patent. Credo has not done so. Credo’s assertion that Amphenol’s Petition was not motivated by a “dispute” about the ’898 Patent is baseless.

Credo also misleads by asserting that the ’898 Patent “does not relate to the same technology” as the patents on which Credo filed suit and that the Petition is “untethered from any parallel litigation or commercial urgency.” Request, 2. Credo’s threatening letter to Amphenol specifically identified the ’898 Patent—along with the patents Credo later sued on—as among a pool of patents that “protect[.]” Credo’s AEC products. EX2005, 1. The ’898 Patent and the patents ultimately asserted in litigation were used together by Credo in an attempt to intimidate Amphenol from competing with Credo’s AEC products. *Id.* Credo’s assertion that the “dispute” about the ’898 Patent has no relation to the patents asserted in litigation is plainly false.

Amphenol and Credo make competing active electrical cables (AECs) which are critical components for building artificial intelligence (AI) data centers. As detailed below, the President has made clear that building AI data centers is in the

national security and vital economic interests of the United States. Through its veiled threats and its assertion campaign against virtually the entire domestic AEC industry, Credo is seeking to limit the supply and availability of these key components precisely when the country's national security and economic interests require building more AI data centers. Because Credo has used the '898 Patent in an attempt to intimidate a direct competitor in the AEC market that is so vital to our nation's interests, it is an effective use of the Board's resources to ensure that Credo is not erecting barriers to competition based on unpatentable claims.

Moreover the '898 Patent issued less than three years ago. As the Director has emphasized, this type of challenge "early in the life of the patent" favors "robust, predictable patent rights and weigh[s] against discretionary denial." *Charles River Laboratories v. Seikagaku*, IPR2025-00440, Paper 9, at 2 (Dir. July 10, 2025). That is particularly true here given that the '898 Patent issued as a result of clear Examiner error.

The Examiner allowed the '898 Patent claims in a first action allowance after failing to perform a proper prior art search. The Manual of Patent Examining Procedure ("MPEP") imposes requirements on where an examiner must search for prior art, but the Examiner did not follow them. The Examiner failed to search for prior art in required areas. As a result, the Examiner failed to find relevant prior art, including the references used in the Petition's grounds. None of the references

used in the grounds were of record during prosecution. If the Examiner had done a proper search, he would never have allowed the claims of the '898 Patent because they are demonstrably unpatentable. Indeed, Credo abandoned its foreign priority application in China in response to rejections over the prior art. EX1028, 2; EX1029, 2; EX1001, code (30).

It would be an effective use of the Board's resources to conduct an IPR trial to correct the Examiner's material errors early in the life of the '898 Patent so that Credo cannot continue to weaponize the '898 Patent in threatening competitors in the AEC industry.

II. CREDO PUT THE '898 PATENT INTO DISPUTE AND HAD NO "SETTLED EXPECTATION" THAT THE '898 PATENT WOULD NOT BE CHALLENGED EARLY IN ITS LIFE

Credo's assertion that Amphenol lacked a good faith basis for filing this IPR is baseless.

A. Credo Used the '898 Patent in an Attempt to Intimidate Amphenol from Competing with Credo's AEC Products

Amphenol is an American company founded in 1932. Amphenol is one of the world's leading suppliers of active electrical cables for highspeed data centers, such as those used for artificial intelligence. Active electrical cables ("AECs"), unlike passive cables, include signal processing circuitry that improves the cable's performance when installed in a data center. *See* EX1023, ¶19.

The '898 Patent issued less than three years ago on November 8, 2022. EX1001, code (45). The '898 Patent concerns connector paddle cards with “wiring connection geometry that reduces impedance mismatch.” EX1001, Abstract. A “paddle card” is “a specialized type of daughter card that functions as an adapter, typically having a minimal number of electronic components that couple signals from the edge connector to external system components.” *Id.*, 1:27-31. In the '898 Patent, the paddle card is a printed circuit board (“PCB”) “used as part of a cable connector,” where “signal wires” in the cable are “soldered to terminals along one edge of the card.” *Id.*, 1:35-39, 1:46-51. Credo characterizes the '898 Patent as “protect[ing]” “Credo’s AECs.” EX2005, 1.

On September 1, 2023, Credo sent a letter to Amphenol asserting that Credo’s allegedly “new product category” of “Active Electrical Cables (AECs)” was “protected by numerous issued patents and pending applications.” *Id.* The letter listed eleven (11) patents that allegedly “protect[]” Credo’s AECs. *Id.*, 1-2. That list included the '898 Patent, the three patents Credo later filed suit on—the '233 Patent,¹ the '252 Patent,² and the '111 Patent³—and seven others. *Id.*, 1-2.

¹ U.S. Patent No. 10,877,233 is challenged in IPR2025-00835.

² U.S. Patent No. 11,012,252 is challenged in IPR2025-00834.

³ U.S. Patent No. 11,032,111 is challenged in IPR2025-00699.

Credo’s letter included a not-so-veiled threat: “Credo understands that Amphenol may be making, using, selling, offering for sale, or importing into the United States active electrical cables that compete with Credo’s HiWire™ AECs” which “may constitute ***unlawful infringement***⁴ of Credo’s intellectual property, including the [’898 Patent and the other] issued patents listed” in the letter. *Id.*, 2. Credo concluded its letter by requesting that Amphenol “identify any active electrical cables that Amphenol has made, used, sold, offered for sale, or imported into the United States” and “provide three samples” “[i]n order for Credo to ***assess its rights.***” *Id.*

Amphenol explained that it found Credo’s request that Amphenol “share extensive product information with a competitor [] unreasonable, particularly given the nebulous nature of [Credo’s] concerns.” EX1021, 4. But because Amphenol believed that sharing some information would “ally Credo’s concerns,” Amphenol was open to providing some product information if Credo would agree to keep it “in confidence to be used solely for the analysis mentioned in your letter” and under the condition that Credo would then “either confirm for us there is no issue with the representative product or detail Credo’s concerns with respect to that product.” *Id.*

⁴All emphasis is added unless otherwise indicated.

Credo said it could accept Amphenol’s confidentiality terms so long as Credo could share the information with “other outside counsel and technical consultants.” *Id.*, 3. Amphenol was open to that proposal but requested a list of the individuals with whom Credo intended to share the information. *Id.*, 2. Credo indicated that it wanted to show Amphenol’s product information to “one of Credo’s outside patent counsel.” *Id.* Amphenol noted that the lawyer Credo identified “is involved in prosecuting Credo patents” so sharing product information with him carried an “unreasonable risk that it would be used for patent prosecution.” *Id.*, 1. Amphenol remained open to sharing some product information under reasonable conditions and suggested that Credo identify “someone else who is better positioned to limit use of the information to only the contemplated analysis such that we can move forward.” *Id.* Credo never responded to that Amphenol letter dated December 23, 2023.

After Credo appointed a new Chief Legal Officer in late August of 2024, Amphenol’s General Counsel wrote to Credo’s new Chief Legal Officer on October 10, 2024, explaining that Credo stopped corresponding with Amphenol in connection with the “threat implied” in Credo’s September 2023 letter identifying “eleven Credo patents.” EX1022. Amphenol noted that it would “involve significant time and expense” for both parties if Amphenol needed to take action on all eleven patents. *Id.* Given that, Amphenol sought indications from Credo

about whether Credo considered the matter to be “closed.” *Id.* Once again, Credo never responded.⁵

On March 13, 2025, Credo filed a complaint at the ITC against Amphenol, Molex, TE Connectivity, and Volex. On that same day, Credo also filed three complaints in the Eastern District of Texas against Amphenol, TE Connectivity, and Volex, respectively, and a complaint in the District of Delaware against Molex. All five complaints alleged infringement of three of the patents that had been identified in Credo’s September 2023 letter to Amphenol—the ’111 Patent, the ’252 Patent, and the ’233 Patent. *See* Table 1 (below). Credo later amended its ITC complaint to drop Volex but maintained its district court action against Volex. On April 14, 2025, the ITC instituted an investigation (No. 337-TA-1446) based on Credo’s amended complaint against Amphenol, Molex, and TE Connectivity. 90 Fed. Reg. 16551 (Apr. 18, 2025).

⁵ These communications between Amphenol and Credo involving the ’898 Patent and other Credo patents are summarized in Appendix A.

Table 1: Credo Infringement Actions on '111, '252, and '233 Patents

Forum	Defendant (Respondent)	Case No.
ITC	Amphenol Corp., Molex, LLC, TE Connectivity PLC	337-TA-1446
D. Del.	Molex, LLC	1:25-cv-00316
E.D. Tex.	Amphenol Corp.	2:25-cv-00296
E.D. Tex.	TE Connectivity, PLC	2:25-cv-00297
E.D. Tex.	Volex, PLC	2:25-cv-00298

Amphenol filed this Petition on April 1, 2025—just 19 days after Credo sued Amphenol at the ITC and in the Eastern District of Texas. Nine days later (Apr. 10, 2025), Amphenol filed IPRs challenging the three asserted patents.

B. Credo Put the '898 Patent into Dispute and Has Done Nothing to Remove the Dispute

Credo’s false assertion that Amphenol filed this IPR “to impose unnecessary costs on Patent Owner in retaliation for asserting unrelated patents in concurrent litigation” misstates the facts. Request, 2.

Credo would have the Director believe that after being sued on three patents, Amphenol hatched a “retaliation” plan to attack the '898 Patent, and then prepared and filed this Petition and the supporting expert declaration all in the span of 19 days while also preparing to file three other petitions nine days later. That strains credibility.

Credo’s assertions that the '898 Patent is “unrelated” to Credo’s “patents in concurrent litigation” and that this IPR is “untethered from any parallel litigation

or commercial urgency” are wrong. Request, 2. In its threatening letter to Amphenol, Credo grouped the ’898 Patent with the patents asserted in the litigations (and others) and alleged that this pool of patents collectively “protect[]” Credo’s AEC products. EX2005, 1-2. Credo further alleged that Amphenol’s sale of products that compete with Credo’s AEC products “may constitute unlawful infringement” of the “listed” patents—including the ’898 Patent. *Id.* Credo has told the Director that in this September 2023 letter “Credo expressly marked its rights” and “provid[ed] Amphenol with actual notice of its infringement” of the listed patents. EX1027, 29.

After having alleged that Amphenol may be unlawfully infringing the ’898 Patent, Credo has conspicuously avoided doing anything to remove its implied threat. As detailed *supra* §II.A, after having put the ’898 Patent into dispute in its September 2023 letter, Credo stopped communicating with Amphenol without the parties having reached any understanding. Credo then ignored Amphenol’s October 2024 letter seeking confirmation that the matter was closed. EX1022. Credo’s assertion that there is no “ongoing controversy” involving the ’898 Patent (Request, 2) is belied by Credo’s own actions. Credo has never represented that it will not sue Amphenol for alleged infringement of the ’898 Patent. Indeed, Credo recently filed lawsuits against virtually the entire domestic AEC industry alleging infringement of other patents that Credo grouped together with the ’898 Patent in

threatening Amphenol. EX2005. If Credo wanted to remove any dispute between the parties over the '898 Patent and render this IPR unnecessary, Credo could have given Amphenol a covenant not to sue on the '898 Patent. Credo has not done so.

Amphenol's filing of this IPR is not a "misuse of the IPR process." Request,

2. Credo used this patent to implicitly threaten Amphenol to gain an advantage in the AEC market at a time when our national policy is encouraging the building of AI data centers to serve our nation's vital interests. *See infra* §IV. Credo has since ignored Amphenol's communications seeking to resolve the matter while conspicuously avoiding every opportunity to remove the threat. The '898 Patent issued as result of clear examiner error (*see infra* §III) and is demonstrably unpatentable, as shown in the Petition and confirmed by Credo's abandonment of the application used to claim foreign priority even before Credo sent its September 2023 letter. *See* EX1028; EX1029; EX1001, code (30); EX2005. This IPR challenges the '898 Patent early in its life to correct a material error. It is an appropriate and effective use of the IPR process to find the '898 Patent unpatentable so that Credo can no longer weaponize it against Amphenol and other competitors in an attempt to stifle competition in the AEC market.

C. The Director’s Decisions Establish that Credo Has No “Settled Expectations” for the ’898 Patent that Issued in 2022

The ’898 Patent issued on November 8, 2022 and was only in existence for approximately two and a half years when Amphenol filed its Petition on April 1, 2025.

The Director’s decisions establish that Credo has *no* “strong settled expectations that favor discretionary denial” for the ’898 Patent that issued late 2022. *Berkshire Hathaway Energy v. Birchtech*, IPR2025-00274, Paper 23, at 3 (Dir. July 2, 2025) (rejecting discretionary denial, “[T]he challenged patents *issued in 2019 and 2020*, such that Patent Owner *has not developed strong settled expectations* that favor discretionary denial.”); *Cambridge Indus. USA v. Applied Optoelectronics*, IPR2025-00434, Paper 11, at 2-3 (Dir. June 26, 2025) (rejecting discretionary denial, no “strong settled expectations” for patents issued in 2019 and 2020); *Webgroup Czech Republic v. Dish Technologies*, IPR2025-00467, Paper 14, at 2 (Dir. July 16, 2025) (no “strong settled expectations” for patents issued in 2019 and 2021); *Zhuhai CosMX Battery Co. v. Ningde Amperex Technology*, IPR2025-00385, Paper 9, at 2 (Dir. July 2, 2025) (rejecting discretionary denial, no “strong settled expectations” for patent issued in 2021).

Credo halfheartedly argues that it had “settled expectations” because Credo “reasonably relied on Amphenol’s inaction in deciding to not initiate litigation involving the ’898 Patent for more than a year.” Request, 5. Credo cites no

authority to support this incredible assertion—because none does. Credo never even explains, let alone establishes, some way in which Credo “relied on Petitioner’s [alleged] inaction.” Request, 5. Moreover, any (unsubstantiated) reliance would have been unreasonable. Amphenol never gave Credo reason to believe that Amphenol would not challenge any of the patents that Credo’s September 2023 letter threatened absent Credo removing that implied threat. It is Credo who initiated communication with Amphenol and then ceased communicating despite Amphenol’s good faith efforts to reach a non-judicial resolution. *See supra* §II.A. Amphenol made it clear that unless Credo confirmed that the matter was closed (which Credo never did), Amphenol reserved its rights to respond to Credo’s threat. EX1022 (“If Credo does not regard this matter as concluded, Amphenol would need to respond to the threat implied in [Credo’s September 2023] letter”). Credo’s assertion that it had settled expectations based on Amphenol’s inaction is baseless. Moreover, Credo has not explained how it could even have settled expectations when the ’898 Patent’s foreign priority application was abandoned after the examiner rejected the claims over the prior art. EX1028, 4-11; EX1029, 2.

D. Amphenol’s Early Challenge Favors Robust Predictable Patent Rights and Weighs Against Discretionary Denial

The ’898 Patent only recently issued in November of 2022. Amphenol’s Petition (filed April 1, 2025) was filed within about two and a half years into the life of the ’898 Patent.

Amphenol’s challenge to the ’898 Patent “early in the life of the patent” favors “robust, predictable patent rights and weigh[s] against discretionary denial.” *Charles River Laboratories*, IPR2025-00440, Paper 9, at 2 (Dir. July 10, 2025) (rejecting discretionary denial); *Shenzhen Root Technology v. Willow Blossom Holdco*, IPR2025-00554, Paper 9, at 2 (Dir. July 17, 2025) (same); *Alliance Laundry Sys. v. PayRange*, IPR2025-00573, Paper 9, at 2 (Dir. July 17, 2025) (same); *Merck Sharp & Dohme v. Halozyme*, PGR2025-00017, Paper 25, at 2 (Dir. July 2, 2025) (same); *Ajinomoto v. AbTis*, IPR2025-00283, Paper 13, at 2 (Dir. July 2, 2025) (same); *ITM Isotope Techs. v. Johns Hopkins Univ.*, PGR2025-00012, Paper 11, at 2 (Dir. June 25, 2025) (same); *GD Energy Prods. v. Kerr Machine Company*, PGR2025-00031, Paper 11, at 2 (Dir. June 25, 2025) (same); *Google v. BrodTi*, IPR2025-00472, Paper 19, at 2 (Dir. June 25, 2025) (same).

Even if Credo had established some consideration that might favor discretionary denial (Credo has not), Amphenol’s early challenge outweighs it. *See e.g., Zhuhai CosMX Battery* IPR2025-00385, Paper 9, at 3 (the Director finding that “the early challenges to the patents ***tip the balance against***

discretionary denial” even though the FWD was expected *after* trial in a parallel litigation); *ResMed v. Cleveland Med. Devices* IPR2025-00246, Paper 10, at 2 (Dir. June 12, 2025) (an early challenge outweighed party investment in parallel litigation).

Amphenol’s challenge to the ’898 Patent early in its life when Credo had no settled expectations weighs against discretionary denial and comports with the very “purpose and design” of IPRs, which is to “weed out bad patent claims efficiently.” *Thryv v. Click-To-Call Technologies*, 590 U.S. 45, 54 (2020).

E. Credo’s Cited Authority is Readily Distinguishable

Credo cites to a Report from The Committee on the Judiciary on the America Invents Act (EX2006, “the Report”). Request, 7 (citing EX2006, 40). Credo suggests that the Report supports denial of this IPR to “limit unnecessary and counterproductive litigation costs.” *Id.* The Report supports no such thing. The cited section of the Report explains that IPRs were intended to limit unnecessary litigation *in the district courts* by “providing a more efficient system for challenging patents that should not have issued” and thereby improve patent quality. EX2006, 39-40. Instituting an IPR trial here would *further* the “fundamental policy objective[s]” explained in the Report—not contradict them as Credo erroneously alleges. Request, 7.

Credo also alleges the absence of an ongoing litigation on the '898 Patent means that this case “mirrors recent discretionary denial decisions.” Request, 5. That is plainly false. The decisions Credo string-cites involved very different factual scenarios and are easily distinguished. Request, 5-6.

In *Google LLC v. Mullen Indus. LLC*, IPR2025-00227, Paper 13⁶ (PTAB June 25, 2025) (“*Mullen*”), the patent was dismissed from a litigation, had “been in force since 2017, and was the subject of an earlier proceeding in which the Board denied institution... on the merits.” *Id.*, 4. Under those circumstances, “settled expectations and arguments of inefficiency tip[ped] the balance in favor of discretionary denial.” *Id.* Here, the '898 Patent was not dismissed from a litigation, only recently issued in November of 2022, and “has been... unchallenged since its issuance.” Request, 1. Credo has no “settled expectations” that would “tip the balance in favor of discretionary denial” as in *Mullen*. *Mullen*, Paper 13, at 4; *supra* §II.C.

In *Ericsson Inc. v. Procomm International PTE. LTD*, IPR2024-01453, Paper 15⁷ (PTAB June 25, 2025), “[t]he challenged patent was dismissed **with prejudice** from the litigation.” *Id.*, 3. The patent had also “been in force since as

⁶ Credo’s Request cites Paper 14 from *Mullen* in error. *See* Request, 5.

⁷ Credo’s Request cites Paper 16 from *Ericsson* in error. *See* Request, 5.

early as 2006, and Petitioner was aware of it as early as 2013.” *Id.* Under those facts, “Patent Owner’s arguments of inefficiency and settled expectations tip the balance in favor of discretionary denial.” *Id.*, 3. The dismissal with prejudice foreclosed the patent owner from later suing the petitioner on the patent. But here, Credo has refused Amphenol’s request for confirmation that Credo considered the matter closed. EX1022. There is nothing “inefficient” about having an IPR trial to test the patentability of the ’898 Patent that Credo has used as leverage in an attempt to stifle competition in the AEC market that is so critical to our nation’s interests. *Supra* §II.A, *infra* §IV. Additionally, neither the ’898 Patent only recently issuing (*supra* §II.D) nor Credo’s alleged “settled expectations” (*supra* §II.C) “tip the balance in favor of discretionary denial” as in *Ericsson*, IPR2024-01453, Paper 15, at 3.

In *Cellco Partnership v. Pegasus Wireless Innovation LLC*, IPR2025-00317, Paper 17 (PTAB Jun 26, 2025), the challenged patent had been “dismissed from the parallel district court proceeding... based on a **joint** motion” by the parties that signaled an end to the dispute between the parties over the patent. *Id.*, 4. Here, the ’898 Patent has not been removed from a litigation, Credo has conspicuously done nothing to remove the implied threat made against Amphenol over the ’898 Patent, and Credo has refused Amphenol’s request for confirmation that “this matter is ... closed.” EX1022; *supra* §II.B.

Finally, Credo alleges that *Sig Sauer Inc., v. Lone Star Future Weapons, Inc.*, IPR2025-00410, Paper 13 (PTAB June 26, 2025) is “even more applicable” because there the petitioner “filed the IPR only after being sued for trade secret misappropriation.” Request, 6. Credo ignores that the reason the Director found discretionary denial appropriate in *Sig Sauer* was because the patent had “issued over 10 years ago” so “Patent Owner’s settled expectations weigh in favor of discretionary denial.” *Id.*, 2. Credo has no settled expectations given that the ’898 Patent only recently issued and the foreign priority application was abandoned. *See supra* §II.C.

Credo seizes on the Director noting that in *Sig Sauer* “[i]n addition... there is persuasive argument that the filing of the Petition may be inappropriate.” *Sig Sauer*, IPR2025-00410, Paper 13, at 2. The Director cited the patent owner’s discretionary denial briefing where the patent owner argued that the petitioner had no reasonable apprehension of suit, that the challenged patent was entirely unrelated to the trade secret dispute between the parties, and that the timing of the IPR was gamesmanship to apply pressure to the patent owner. *Id.* Those are not the facts here. Credo threatened Amphenol with a pool of patents that included the ’898 Patent and the patents Credo later sued on. EX2005. Amphenol filed this IPR within **19 days** of being sued and challenged the ’898 Patent in parallel with filing IPRs against the three patents Credo sued on. Credo cannot credibly suggest

that Amphenol has no reasonable apprehension that it could be sued on the '898 Patent given that (1) Credo sent Amphenol a letter alleging that Amphenol's sale of products competing with Credo's AEC products "may constitute unlawful infringement" of the '898 Patent (EX2005), (2) Credo ignored Amphenol's letter seeking confirmation that the matter was closed (EX1022), and (3) Credo initiated expansive litigation on three other patents identified in the same threatening letter (EX2005; *supra* §II.A).

Credo's suggestion that the Director has established a policy whereby IPRs are not appropriate for patents that are uninvolved in litigation is simply wrong. None of the cases that Credo cites have facts like those here.

III. CORRECTING THE EXAMINER'S MATERIAL ERROR IN ALLOWING THE CLAIMS WOULD BE AN EFFECTIVE USE OF THE BOARD'S RESOURCES SO DISCRETIONARY DENIAL IS UNWARRANTED

The Examiner failed to do a proper search (as required by the MPEP) and then allowed the claims in a first action allowance. The Examiner failed to find any of the prior art references used in the Petition's grounds. The claims of the '898 Patent are demonstrably unpatentable. Indeed, Credo abandoned its counterpart application in China in the face of rejections over prior art that bears some similarities to the references used in the grounds. EX1028, 4-11; EX1029, 2.

The Examiner materially erred by failing to do a proper search, by failing to find the prior art used in the grounds, and by allowing unpatentable claims to issue.

It would be an effective and appropriate use of the Board's resources to conduct an IPR trial to correct these errors.

A. The Examiner Materially Erred by Failing to Conduct a Thorough and Complete Search of the Prior Art as Required by the MPEP

MPEP §904.02 states that “an examiner *must* conduct a thorough and complete search of the prior art,” which “requires three distinct [planning] steps by the examiner.” The first step is “(A) identifying the field of search.” *Id.* MPEP §904.02(a) states that the “search areas included in a proper field of search normally include the classification locations in which the claimed subject matter of an application would be properly classified at the time of the application's classification or grant of a patent.” “A search is considered complete when each of the identified areas are fully considered.” MPEP §904.02.

The face of the '898 Patent shows the classifications the Examiner searched (*see* EX1001, codes (58)) and the assigned International and U.S. Classifications (*see id.*, codes (51), (52)). As shown in the Table below, there is a complete mismatch in these classifications. *Compare also* EX1002, 48 (Examiner Search Notes) *with* EX1002, 49 (Issue Classification). It is clear from the face of the '898 Patent that the Examiner did not search *any* of the '898 Patent's assigned classifications.

Examiner-searched Classifications	Issue Classifications
(58) Field of Classification Search CPC H01R 12/79; H01R 12/78; H01R 12/592 See application file for complete search history.	(51) Int. Cl. <i>H01R 3/00</i> (2006.01) <i>H01R 12/53</i> (2011.01) <i>H05K 1/11</i> (2006.01) <i>H01R 43/02</i> (2006.01) (52) U.S. Cl. CPC <i>H01R 12/53</i> (2013.01); <i>H01R 43/02</i> (2013.01); <i>H05K 1/117</i> (2013.01); <i>H05K 2201/09163</i> (2013.01); <i>H05K 2201/09409</i> (2013.01)

The Examiner's error in failing to follow the proper procedure by searching the relevant International and U.S. Classifications led to a first action allowance and was far from harmless. As just one example, if the Examiner had searched where he should have searched, the Examiner would have found the Ayzenberg reference used in Ground 1, which renders every independent claim unpatentable. Petition, 4 (Ground 1 demonstrates that Ayzenberg anticipates or renders obvious independent claims 1, 9, 16, and others). Ayzenberg shares two International Classifications (**H01R12/53**, **H05K1/11**) and two U.S. Classifications (**H01R12/53**, **H05K1/117**) with the '898 Patent:

'898 Patent Issue Classifications	Ayzenberg Issue Classifications
(51) Int. Cl. <i>H01R 3/00</i> (2006.01) <i>H01R 12/53</i> (2011.01) <i>H05K 1/11</i> (2006.01) <i>H01R 43/02</i> (2006.01) (52) U.S. Cl. CPC <i>H01R 12/53</i> (2013.01); <i>H01R 43/02</i> (2013.01); <i>H05K 1/117</i> (2013.01); <i>H05K 2201/09163</i> (2013.01); <i>H05K 2201/09409</i> (2013.01)	Publication Classification (51) Int. Cl. <i>H01R 12/53</i> (2011.01) <i>H01R 13/6581</i> (2011.01) <i>H01R 13/6594</i> (2011.01) <i>H01R 13/6471</i> (2011.01) <i>H01R 13/6592</i> (2011.01) <i>H05K 1/11</i> (2006.01) (52) U.S. Cl. CPC <i>H01R 12/53</i> (2013.01); <i>H01R 13/6581</i> (2013.01); <i>H01R 13/6594</i> (2013.01); <i>H05K 2201/10356</i> (2013.01); <i>H01R 13/6592</i> (2013.01); <i>H05K 1/117</i> (2013.01); <i>H01R 13/6471</i> (2013.01)

It is clear on the face of the '898 Patent that the Examiner did not conduct a “thorough and complete search of the prior art” as required by the MPEP §904.02 and then subsequently failed to find any of the references used in the grounds. This shows that the Examiner erred in allowing the claims of the '898 Patent on the first action.

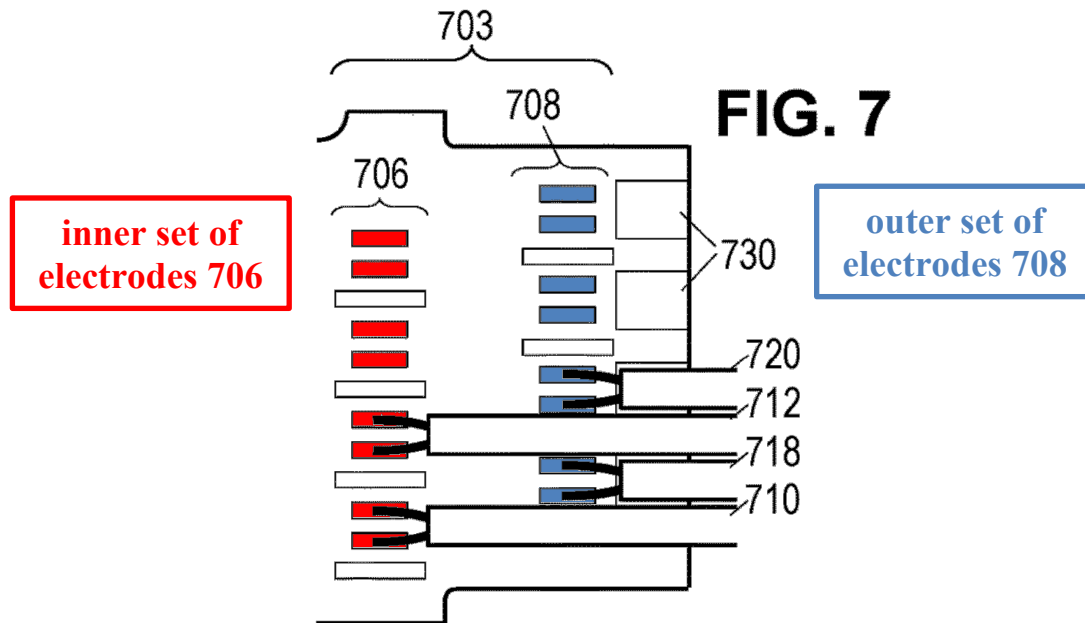
B. The Examiner Materially Erred by Allowing the Claims of the '898 Patent to Issue

1. The Examiner Allowed the '898 Patent in a First Action Allowance

The '898 Patent concerns printed circuit boards (“PCB”) called “paddle cards” that terminate shielded signal wires in a data cable. Modular connectors—described in well-known industry standards—conventionally enclose the PCBs and physically connect with matched receiving sockets to provide electrical connection to attached signal wires. Data cables terminated with such connectors are routinely used to interconnect electronic devices. Petition, 1.

The '898 Patent's PCBs are “used as part of a cable connector” where “signal wires” in the cable are soldered to two rows of electrodes at the edge of the PCB—an inner set and an outer set—and the electrodes in the inner set are “staggered relative to the electrodes of the outer set.” Petition, 5-6; EX1001, 1:35-39, 1:46-51, 5:42-50, 7:7-8, 7:56-57, 8:35-37, Fig. 7 (below showing inner set 706 staggered relative to outer set 708). This wiring geometry was well-known in the

art. Petition, 9-12 (discussing Ayzenberg, EX1005), 60-62 (discussing Alden, EX1006).

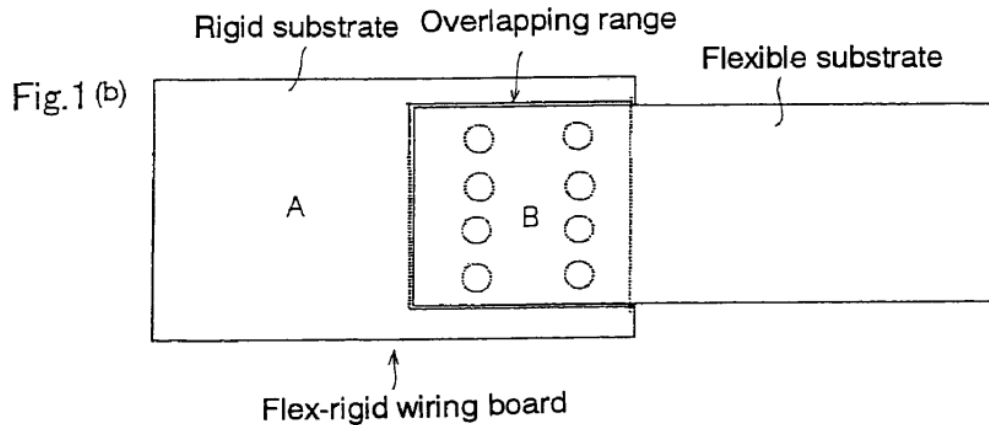


'898 Patent, Fig. 7 (annotated)

The Examiner's first action allowed all claims. EX1002, 40, 44. The Examiner appeared to erroneously believe that Kawaguchi was the closest prior art. The Examiner simply paraphrased the independent claims in stating that:

Kawaguchi et al [US7655869] fails to teach or suggest a printed circuit board that comprises edge connector traces arranged along a first edge; Outer and inner sets of electrodes arranged parallel to a second edge for attaching exposed ends of sheathed wires in outer and inner wires of a cable, respectively; *with the electrodes in the inner set being staggered relative to the electrodes in the outer set.*

Id., 40, 44-45 (emphasis added). Kawaguchi Fig. 1(b) is reproduced below.



Kawaguchi, Fig. 1(b)

It appears that the Examiner found that Kawaguchi did not disclose what the independent claims require based on the above-bolded language because Kawaguchi's electrodes (the circles "B" in Fig. 1(b)) are not arranged "*with the electrodes in the inner set being staggered relative to the electrodes in the outer set.*" *Id.*, 45 (emphasis added).

After the First Action Allowance the Applicant filed an RCE (*id.*, 28) with an IDS listing ten new references. *Id.*, 28-32. The Examiner issued another Notice of Allowance that simply repeated the previous reasons for allowance. *Id.*, 8, 12-13 (once again stating that Kawaguchi does not show what the paraphrased independent claims require).

2. The Examiner's Mistaken Belief that Staggering Inner and Outer Sets of Electrodes Was Inventive Was Error Material to Patentability

Grounds 1-3 rely on Ayzenberg alone or combined with Lugthart or Janssen, while Grounds 4-6 rely on Alden alone or in combination with Lugthart or Janssen.

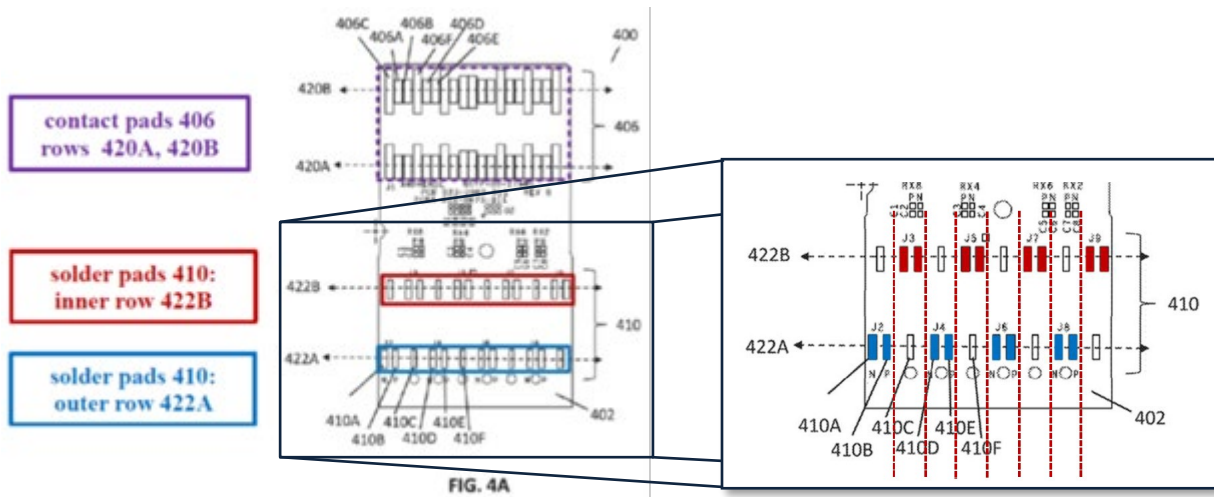
Petition, 4. Credo does not dispute that the Petition’s grounds all rely on prior art that the Examiner failed to find and that was not considered during prosecution.

Because the Petition’s prior art references were “not before the examiner, the examiner could not have considered the [Petition’s] combination[s]... during prosecution.” *Hamilton Techs. v. Tehrani*, IPR2020-01199, Paper 6, at 21 (Jan. 6, 2021) (finding that the Office materially erred in allowing claims by failing to consider the references used in the petition’s grounds that were not before the examiner, warranting reconsideration and instituting trial). “[T]he examiner did not have the benefit of [the IPR arts’] teachings” and committed material error by failing to identify this prior art during prosecution and appreciating that the ’898 Patent claims are not patentable in view of this prior art. *Id.*

Every ground relies on Ayzenberg or Alden to teach the staggered electrode limitation that is required by every independent claim (*see* Limitations [1D], [9B4], and [16A4])⁸ and appears to be the reason the Examiner allowed the ’898 Patent.

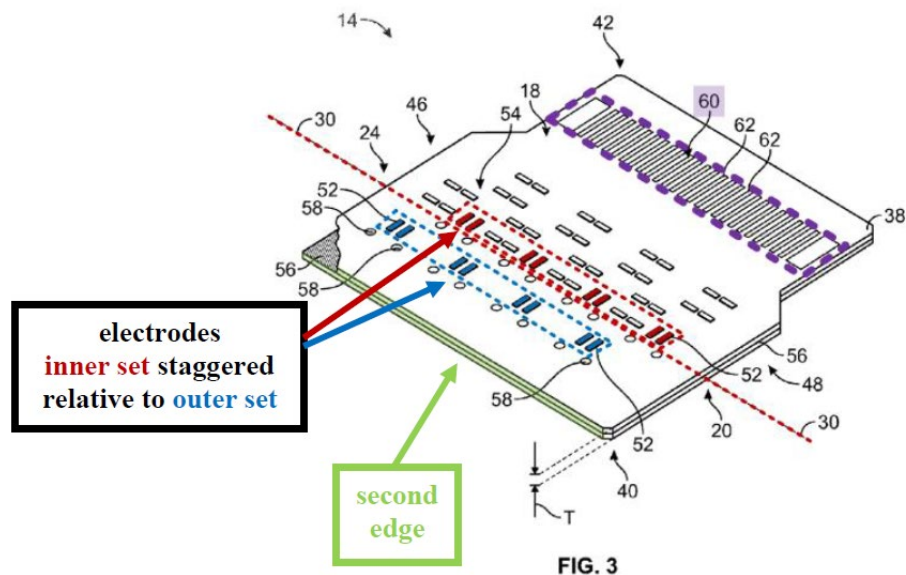
As shown below, Ayzenberg teaches a PCB where “*the electrodes in the inner set*” (row 422B) are “*staggered relative to the electrodes in the outer set*” (row 422A) as claimed:

⁸ These claim limitation labels are defined in the Petition’s Appendix A. *See* Petition, 96-100.



Petition, 10-11 (annotating Ayzenberg, Fig. 4A)

As shown below, Alden also discloses a PCB where “the electrodes in the inner set” (red electrodes 52) are “staggered relative to the electrodes in the outer set” (blue electrodes 52) as claimed:



Petition, 69 (annotating Alden, Fig. 3)

There should be no reasonable dispute that Ayzenberg and Alden anticipate or render obvious independent claims 1, 9, and 16, and meet the staggered electrode requirement in Limitations [1D], [9B4], and [16A4]. *See* Petition, 23-24, 28-29, 31-33 (Ayzenberg applied to [1D], [9B4], and [16A4]); *id.*, 69-70, 73, 74 (Alden applied to [1D], [9B4], and [16A4]).

C. The Office’s Material Error in Allowing the ’898 Patent to Issue Weighs Against Discretionary Denial

As demonstrated *supra* §§III.A, III.B, the Examiner erred “in a manner material to the patentability of the challenged claims” by failing to do a proper search, by failing to identify the prior art used in the grounds, and by allowing the claims based on the staggered electrode limitation that was known. *Advanced Bionics v. MED-EL Elektromedizinische Geräte GmbH*, IPR2019-01469, Paper 6, at 8 (Feb. 13, 2020) (precedential).

Any of these errors is reason enough why discretionary denial is inappropriate. *Anthony v. ControlTec*, IPR2025-00559, Paper 12, at 2 (Dir. July 16, 2025) (rejecting discretionary denial because the examiner materially erred in overlooking the prior art references used in the IPR’s grounds which were not of record during prosecution); *Tesla v. Charge Fusion Techs.*, IPR2025-00152, Paper 11, at 2-3 (Dir. June 12, 2025) (same). The material errors committed by the Examiner make discretionary denial unwarranted because “it is an appropriate use of Office resources” to review the Examiner’s error. *Anthony*, IPR2025-00559,

Paper 12, at 2; *see also Advanced Bionics*, IPR2019-01469, Paper 6, at 8–9 (correcting a material error in examination is a proper use of the Board’s resources and makes discretionary denial unwarranted).

Reviewing the Office’s material error outweighs any factors that might otherwise have favored discretionary denial. In *Microsoft v. Partec Cluster Competence Center GmbH*, the Director referred the case to a merits panel because reviewing the examiner’s material error outweighed a showing that trial in a parallel proceeding was expected before FWD. IPR2025-00318, Paper 9, at 2-3 (Dir. June 12, 2025). The Director reached the same conclusion in *Padagis US v. Neurelis*, IPR2025-00464, Paper 12, at 2-3 (Dir. July 16, 2025).

If Credo had any settled expectations (it does not as discussed *supra* §II.C), conducting a trial to correct the Examiner’s material error would outweigh them. In *Anthony*, the Director determined that the examiner materially erred by overlooking the IPR’s prior art references in issuing a first action allowance and that this material error outweighed the fact that challenged patents had been in force for 17 and 18 years. *Anthony*, IPR2025-00559, Paper 12, at 2. In *Xencor v. Merus*, the Director determined that reviewing the Office’s material error outweighed settled expectations for a nine-year-old patent. IPR2025-00604, Paper 12, at 2-3 (Dir. July 17, 2025). Here, the Examiner’s material errors outweigh any “settled expectations” Credo could possibly have (Request, 5) and weighs against

discretionary denial. *See Microsoft*, IPR2025-00318, Paper 9, at 2-3; *Padagis US*, IPR2025-00464, Paper 12, at 2.

It is an appropriate use of the Board's resources to address and remediate the Examiner's errors via IPR, particularly where Credo has used the '898 Patent by implicitly threatening a direct competitor to stifle competition for AECs that are critical to building the AI data centers crucial to national security and our nation's vital economic interests. *See supra* §II.A, *infra* §IV.

IV. VITAL NATIONAL SECURITY AND ECONOMIC INTERESTS WEIGH DECISIVELY AGAINST DISCRETIONARY DENIAL

Credo characterized the '898 Patent as “protect[ing]” “Credo's AECs.” EX2005, 1. As Credo concedes, its AECs are used in data centers for artificial intelligence. EX1027, 4-5; EX1025, 1; EX1026, 1. As explained below, Executive Order 14179 makes clear that building data centers to support AI is vital to national security and our nation's economic interests.

Credo weaponized the '898 Patent to implicitly threaten a direct competitor. EX2005. Credo then filed multiple lawsuits against virtually the entire domestic AEC industry (*supra* §§II.A, II.B) seeking to diminish competition and the options for those who are and will be building the AI data centers critical to our nation's national security and economic interests, all based on unpatentable claims. President Trump's Executive Order 14179 on AI, the Director's guidance on discretionary denial, and the vital national security and economic interests at stake,

all compel referring the Petition to a merits panel to assess Amphenol's patentability challenges.

A. President Trump's Executive Order 14179 Makes It the Express Policy of the United States to Sustain and Enhance America's Global AI Dominance

Three days after taking office, President Trump promulgated Executive Order 14179, "Removing Barriers to American Leadership in Artificial Intelligence," stating that "[i]t is the policy of the United States to sustain and enhance America's global AI dominance in order to promote human flourishing, economic competitiveness, and national security." EX1057, 1 (Jan. 23, 2025). The Executive Order's express purpose is "for the United States *to act decisively to retain global leadership in artificial intelligence.*" *Id.* "[L]osing the A.I. arms race" is an "*existential threat*" on par with "Iran getting a nuclear weapon." EX1058, 2-3 (July 15, 2025 statement of Interior Secretary Burgum). "[W]inning the A.I. race with China *is a top priority.*" *Id.*, 2.

Memorandum M-25-21 from the Office Management and Budget requires the heads of all Executive Branch departments—including the Commerce Department—to "build effective policies and processes for the timely deployment of AI" and states that "Agencies must remove barriers to innovation and provide the best value for the taxpayer." EX1059, 1-2 (Apr. 3, 2025). "Agencies must develop public AI strategies that elevate AI adoption and innovation as a priority,

while increasing transparency to the American public, civil society, and industry.”

Id., 2. “Agencies *have a responsibility to identify and remove barriers to further*

responsible AI adoption and application[.]” Id., 5. The Commerce Department

states that “*AI* holds great potential for transformational advances that *will*

enhance U.S. economic and national security” and has committed to using “its

vast scientific and industrial expertise to evaluate and understand the capabilities of

these rapidly developing [AI] systems and identify vulnerabilities and threats” to

them. EX1060, 1-2 (June 3, 2025).

The ’898 Patent poses a threat to rapidly developing AI systems. The Commerce Department—and the Director—can mitigate that threat by letting the Board decide Amphenol’s Petition on the merits. If the merits panel agrees with Amphenol that the ’898 Patent claims are unpatentable, then an FWD canceling those claims will remove the barrier and damaging threat that Credo’s invalid patent poses to a competitive marketplace needed to supply the exploding demand for active electrical cables (AECs) needed to build the AI data centers required to sustain and enhance America’s global AI dominance and win the AI race. If Credo is to avoid an IPR trial on a patent Credo has used to threaten an industry vital to our nation’s security and economic interests, it should be on the merits.

B. The Challenged Claims Involve Components—Active Electrical Cables (AECs)—That Are Key Enabling Technologies for AI

According to Credo, the ‘898 Patent “protect[s]” “Credo’s AECs.” EX2005,

2. There is no dispute that active electrical cables (AECs) are *key enabling technologies* for modern data centers supporting AI. EX1027, 4 (admitting same); *see also* EX1025, 1; EX1026, 1. Credo argues that “AECs are used by data centers... *for enabling high-speed data transmission*, for example, in server-to-server and other data distribution applications.” EX1023, ¶¶18-19. “[H]igh-speed connectors are complex designs that can deliver data at... 400 gigabits per second [Gbps][.] Microchips can function only as fast as their connectors will let them, so the race is on to develop connectors that test the limits of technology.” EX1061, 1. AECs enable “the *critical transition to higher-speed interconnects driven by AI* and cloud computing infrastructure.” *Id.*, 2.

Credo has told the Director that AECs provide “high-performance serial connectivity solutions for... *artificial intelligence*” and “play a significant role in modern data center architectures.” EX1027, 4-5, 27 (AECs are “relied upon” by “major data center operators”). Credo markets its “AEC... Products for *AI* Scaling” and “highlight[s] *their role in enabling scalable AI infrastructure*.” EX1062, 1; EX1026, 1 (Credo marketing “AECs For AI Backend Networks” to “support the lossless backend... network *that AI clusters are built on*”). Indeed, Credo has characterized the high-speed connectivity supported by its AECs as

providing “breakthrough solutions *that enable the next generation of AI-driven applications.*” EX1062, 2. Credo admits that AECs “*are a key enabling technology* for [network] architectures” that “use copper cables as a replacement for the traditional modular chassis backplane” in modern high-density data centers that run at the 400 Gbps data rates used to support AI. EX1063, 2-3; EX1025, 1 (AECs are “the next industry solution to solve the connectivity bottleneck”), 3 (AECs enable “unprecedented” interconnect densities at “75% less volume” than previous technologies).

Credo admits that AECs are superior to alternative cables that could support AI in high-performance data centers because ACEs provide short-distance high-data-rate server and switch connections in a data center rack at lower cost (EX1063, 3) while consuming “50% less power” than optical interconnects (EX1025, 3; EX1024, 1-2 (similar)). Credo itself argues that “energy efficiency is a national priority.” EX1027, 29. Indeed, the Trump administration has declared the country’s lack of “enough power to meet its growing needs for A.I.” a “national energy emergency.” EX1058, 2. AECs can help mitigate that energy emergency due to their substantially reduced power consumption compared to other alternatives.

C. Discretionary Denial is Warranted to Weed Out Credo’s Bad Patent That Credo Used to Threaten a Competitor in an Industry Vital to Our Nation’s Security and Vital Economic Interests

The Director’s March 26, 2025, Memorandum on Interim Processes for PTAB Workload Management makes clear that “[c]ompelling economic... or national security interests” can weigh against discretionary denial. EX1064, 2. Here, Credo asserts that the challenged claims “protect[]” components—Active Electrical Cables—that Credo itself admits are key enabling technologies for AI. EX2005, 1; EX1027, 4-5.

“[I]nter partes review helps protect the public’s ‘paramount interest in seeing that patent monopolies... are kept within their legitimate scope.’” *Cuozzo Speed Technologies v. Lee*, 579 U.S. 261, 279–280 (2016) (citation omitted). Congress intended for IPRs to “weed out bad patent claims efficiently,” to avoid “overpatenting and its diminishment of competition.” *Thryv v. Click-To-Call Technologies*, 590 U.S. 45, 54 (2020). By threatening the AEC industry, based on unpatentable claims procured through the Examiner’s material error (*supra* §III), Credo threatens to increase the costs and reduce the availability of AEC components that are vital to building the AI data centers needed to achieve President Trump’s objective of ensuring that the United States wins the AI arms race and achieves global AI dominance.

The only use of the Director’s discretion consistent with Executive Order 14179 and the Commerce Department’s “responsibility to identify and remove barriers to further responsible AI adoption and application” (*see* EX1059, 5) is to *deny* the Request and refer the Petition to a merits panel. Then the Board can carefully review the patentability of the ’898 Patent to ensure that Credo is not erecting a barrier to the building of AI data centers that are so critical to our nation’s security and economic interests based on unpatentable claims.

V. THE PETITION DOES NOT RELY ON EXPERT TESTIMONY TO FILL ANY GAPS IN THE PRIOR ART

Other than its baseless assertion that this IPR was filed as improper retaliation, Credo argues that discretionary denial is warranted because the Petition allegedly relies on “duplicative and substantively deficient expert testimony.” Request, 7 (alleging that Dr. Sourì’s declaration testimony fails to “provid[e] technical insight or analysis” and “merely repeats, often word-for-word, the conclusory assertions of the Petition without any added reasoning, data, or engineering justification.”).

If the Petition were actually deficient in some way based on its reliance on expert testimony, it should have been a simple matter for Credo to establish that. Credo had an abundance of words to have made such a showing because the Request used only 2,114 of its allocated 14,000 words. The only specific example Credo identifies is a paragraph of testimony used to support Ground 1’s challenge

of a single dependent claim—claim 2—based on Ayzenberg. Request, 7-9 (citing ¶105 of Dr. Sourì’s declaration).

Credo’s attack on Ground 1’s challenge to dependent claim 2 is baseless for reasons discussed *infra* §V.B. But even if it were not, that would provide no basis for discretionary denial. Dependent claim 2 is also challenged in a separate ground (Ground 4) that Credo does not even allege is deficient in any way. Additionally, Credo identifies no alleged deficiency in the grounds challenging the *independent* claims that issued as a result of the Examiner’s material errors (*supra* §III.B.2), nor does Credo identify any alleged deficiency in the Petition’s challenge to any of the other 19 claims of the ’898 Patent beyond dependent claim 2.

Credo wholly fails to substantiate its assertion that the Petition relies on expert testimony in a way that would warrant discretionary denial.

A. The Petition Does Not Overly Rely on Dr. Sourì’s Testimony

For every challenge in the Petition other than Ground 1’s challenge to dependent claim 2, Credo asks the Director to slog through Credo’s *203-page* exhibit (EX2007) which purportedly shows that “large portions of the declaration consist of wholesale duplication, without additional citations, technical elaboration, analysis, or corroborating evidence.” Request, 9. Credo alleges that “[t]his is insufficient to support institution.” *Id.* But Credo only purports to substantiate its assertion by citation to inapposite caselaw establishing nothing other than that

“[a]ttorneys’ argument is no substitute for evidence.” *Id.* (citing *Johnston* and *Enzo*).

Credo exalts form over substance. No authority supports Credo’s assertion that expert testimony is “insufficient to support institution” if the Petition confirms the expert’s analysis using similar words. Dr. Sourì’s testimony does not need “**additional** citations, technical elaboration, analysis, or corroborating evidence” (Request, 9) because the Petition itself includes “citations, technical elaboration, analysis, [and] corroborating evidence” that establishes every argument the Petition advances. Credo does not even allege otherwise for any argument in the Petition other than Ground 1’s showing for dependent claim 2, which is discussed below. *See infra* §V.B.

Amphenol does not dispute that “[a]ttorneys’ argument is no substitute for evidence.” Request, 9. But that does not help Credo because Dr. Sourì’s sworn testimony is **evidence**. The prior art’s teachings themselves clearly meet the claims. Most of the Petition’s citations to Dr. Sourì’s declaration simply confirm that the Petition agrees with Dr. Sourì’s analysis of the prior art teachings. That is a far cry from the Petition **over-relying** on expert testimony to make its unpatentability showing. If there are any issues on which the Board might find it helpful to review expert testimony to “provide helpful context or to explain terms of art,” Dr. Sourì’s testimony corroborates everything he says with citation to a

prior art patent or printed publication. *See* USPTO’s “FAQs for Interim Processes for PTAB Workload Management”⁹ (“Interim-Processes FAQs”), FAQ #22.

The Director has rejected similar challenges to a petition’s reliance on expert testimony where, like here, “[a]lthough Patent Owner argues that discretionary denial is warranted because Petitioner is over-reliant on expert testimony, Patent Owner does not identify any portions of the expert testimony that suggest Petitioner is using its expert to fill gaps in the prior art.” *Cambridge Industries v. Applied Optoelectronics*, IPR2025-00434, Paper 11, at 2 (Dir. June 26, 2025) (denying patent owner’s request for discretionary denial); *see also* Interim-Processes FAQs, FAQ #22 (noting that “[t]he statute and our reviewing court require that petitions be based on prior art patents and printed publications.”).

Credo’s suggestion that Dr. Souris’s testimony warrants no weight under *Xerox* because it uses similar wording as the Petition is likewise baseless. *See* Request, 8-9 (citing *Xerox v. Bytemark*, IPR2022-00624, Paper 9, at 5 (Aug. 24, 2022) (precedential)). *Xerox* was made precedential for its “holding [that a] declaration is entitled to little weight when it contains an exact restatement of the petition’s ***unsupported, conclusory assertions*** without any additional supporting

⁹ *available at*: <https://www.uspto.gov/patents/ptab/faqs/interim-processes-workload-management>).

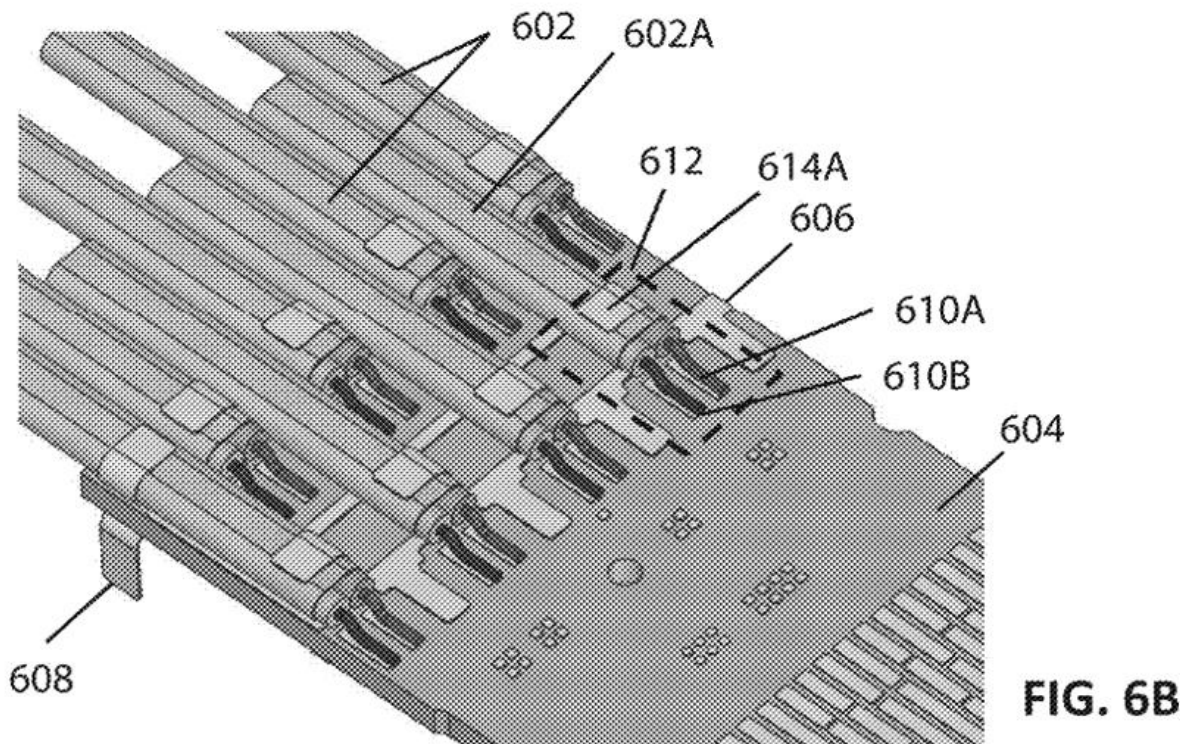
evidence or reasoning.” EX1056, 8. *Xerox* does not say that all expert testimony that supports a Petition’s argument warrants no weight simply because the Petition presents the argument in language the matches the expert’s language. *Xerox* only says testimony warrants no weight *if* the testimony restates an argument made in the Petition that is “unsupported” and “conclusory.” *Xerox*, IPR2022-00624, Paper 9, at 15. That is not the case here because the Petition’s arguments are neither conclusory nor unsupported—the Petition supports its detailed analysis with extensive citation to the prior art. Indeed, Credo never even attempts to establish otherwise for any argument other than Ground 1, claim 2 addressed immediately below. *See infra* §V.B.

B. Credo’s Argument Regarding Dependent Claim 2 Ignores Dr. Souri’s Analysis and Ayzenberg’s Express Teachings

Dependent claim 2 recites “*the electrodes in each of the inner and outer sets being spaced to enable the inner wires to pass between the outer wires while maintaining contact with the at least one surface.*” EX1001, 7:9-12.

Dr. Souri’s testimony in ¶105 explains how and why dependent claim 2 is anticipated by, or at least rendered obvious, over Ayzenberg. EX1003, ¶105; Petition, 24-25 (Ground 1’s showing for claim 2). Credo quotes Dr. Souri’s testimony and alleges that he “fails to address key considerations such as *whether Ayzenberg actually teaches the claimed spacing* to allow inner wires to pass between outer wires while maintaining surface contact.” Request, 9.

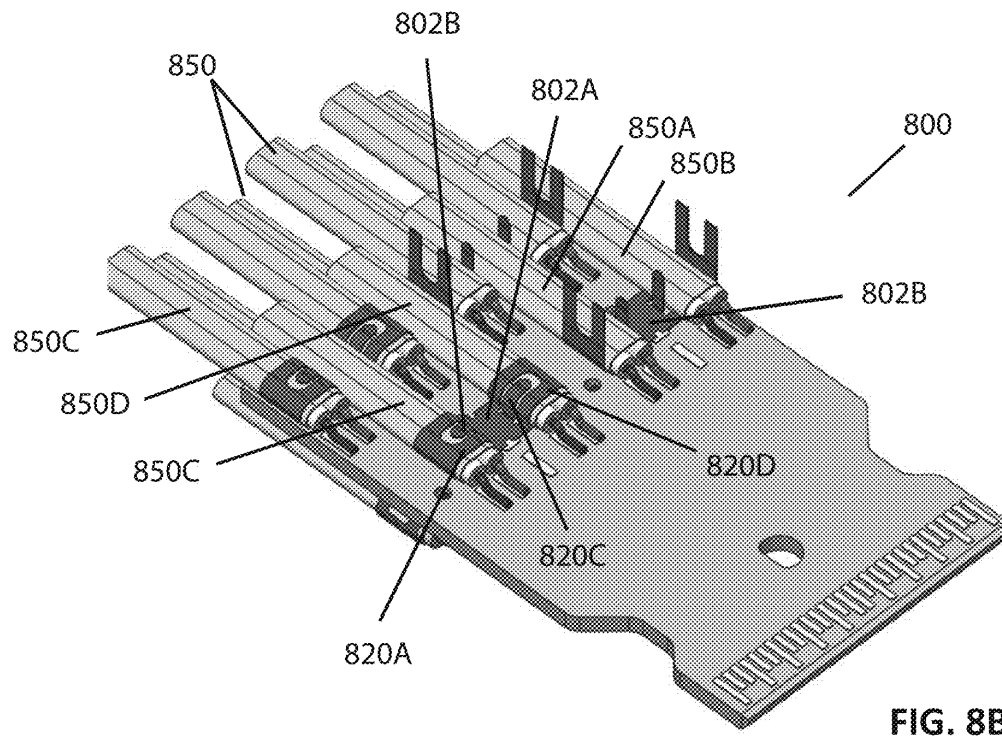
Credo ignores the express disclosure in Ayzenberg (EX1005), [0043] and Fig. 6B that Dr. Souri cites in ¶105. Figure 6B (reproduced below) shows the claimed spacing that allows inner wires to pass between outer wires while “*maintaining contact*” with the PCB’s surface. Dr. Souri’s ¶105 also quotes Ayzenberg’s disclosure that: “Cables with a plurality of conductors *may be physically and electrically mounted to the PCB*, with the conductors for a particular cable *mounted side-by-side on the PCB.*”



Ayzenberg (EX1005), Fig. 6B

Credo also ignores the preceding ¶104 where Dr. Souri addresses Ayzenberg’s Figure 8B (below) and explains that a POSA would have understood that “Figure 8B shows that ‘*inner wires*’ 850D pass between adjacent ‘*outer wires*’

850 while disposed flush against (*‘maintaining contact with’*) the PCB surface (*‘the at least one surface’*).”



Ayzenberg (EX1005), Fig. 8B

Dr. Sourì’s testimony in ¶105 is not conclusory, speculative, or unsupported as Credo alleges. Request, 9. Instead, Dr. Sourì’s sworn testimony cites to the above-discussed clear disclosure in Ayzenberg which meets claim 2’s requirement that “*the electrodes in each of the inner and outer sets being spaced to enable the inner wires to pass between the outer wires while maintaining contact with the at least one surface.*” EX1001, 7:9-12.

Credo does not meaningfully address Ayzenberg’s disclosure. Credo simply alleges in conclusory fashion that Dr. Sourì somehow “fails to address key

considerations such as *whether Ayzenberg actually teaches the claimed spacing* to allow inner wires to pass between outer wires while maintaining surface contact.”

Request, 9. Credo ignores Ayzenberg’s ¶43 and Figs. 6B and 8B that clearly disclose the “claimed spacing” and “maintaining contact.” Credo’s assertion that Dr. Souri’s testimony demonstrating how and why Ayzenberg meets dependent claim 2 is somehow deficient is baseless.

VI. A HOLISTIC ASSESSMENT OF ALL CONSIDERATIONS WEIGHS DECISIVELY AGAINST DISCRETIONARY DENIAL

The Director’s discretionary denial decisions are based on a holistic assessment of all relevant considerations.

Credo’s assertion that discretionary denial is warranted because the ’898 Patent is not in dispute is baseless for the reasons discussed *supra* §II. So too is Credo’s assertion that the Petition’s reliance on expert testimony somehow warrants discretionary denial. *See supra* §V. Those are the only considerations Credo advances. Given that both fail, that should end the matter and the Director should deny Credo’s Request.

There are also several factors that affirmatively weigh against discretionary denial. Amphenol challenged the ’898 Patent “early”—less than three years into its life—which favors “robust, predictable patent rights and weigh[s] against discretionary denial.” *Charles River*, IPR2025-00440, Paper 9, at 2; *see also supra* §II.D (collecting cases). The ’898 Patent issued in a first action allowance because

the Examiner failed to search in the right places, failed to find any of the prior art references relied upon in the Petition, and erred in deeming the claims patentable, which also weighs against discretionary denial. *See supra* §III. Finally, the fact that Credo has weaponized the '898 Patent to threaten a director competitor in the AEC industry that is critical to our nation's security and vital economic interests weighs against discretionary denial. *See supra* §IV.

A holistic assessment of the relevant considerations leads to only one conclusion. The Director should deny Credo's Request and refer the Petition to a merits panel for a decision.

Respectfully submitted,

Date: August 12, 2025

By: / Michael S. Parsons /
Michael S. Parsons, Reg. No. 58,767
WOLF, GREENFIELD & SACKS, P.C.

CERTIFICATE OF WORD COUNT

Pursuant to 37 C.F.R. § 42.24, the undersigned certifies that the foregoing **PETITIONER'S OPPOSITION TO PATENT OWNER'S REQUEST FOR DISCRETIONARY DENIAL** contains 8,725 words excluding; a table of contents, a table of authorities, a certificate of service or word count, or appendix of exhibits or claim listing. Petitioner has relied on the word count feature of the word processing system used to create this paper in making this certification.

Date: August 12, 2025

/Dara Del Rosario/
Dara Del Rosario
Paralegal
WOLF, GREENFIELD & SACKS, P.C.

CERTIFICATE OF SERVICE UNDER 37 C.F.R. § 42.6 (E)(4)

I certify that on August 12, 2025, a copy of the foregoing document, including any exhibits or appendices filed therewith, is being served via electronic mail, as previously consented to by Patent Owner, upon the following:

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Paralegal

WOLF, GREENFIELD & SACKS, P.C.

Appendix A - Amphenol Correspondence with Credo.

Date	From	To	Subject Matter
Letter 09/01/2023	S. Laud (Credo)	Legal Dept. (Amphenol)	- Identifying the '111 patent among eleven total patents and other unidentified patents (“not limited to”) and “pending patent applications” protecting Credo’s AEC products and speculating that Amphenol “may be making, using, selling, offering for sale, or importing into the United States active electrical cables that compete with Credo’s HiWire™ AECs.” - Requesting that Amphenol “identify any active electrical cables that Amphenol has made, used, sold, offered for sale, or imported into the United States, provide three samples of each such product, and provide product specifications or other documentation sufficient to identify the features and functionalities of each such product.” EX2005.
Email 10/10/2023	R. Branham (Amphenol)	S. Laud (Credo)	Amphenol “acknowledge[ing] receipt” of “letter dated September 1, 2023 regarding Credo’s patents,” “assur[ing]” Credo that Amphenol is “taking this matter seriously and giving it our careful attention,” and committing to “send a more substantive response once we’ve had time to review the situation in more detail.”

Date	From	To	Subject Matter
			EX1021, 5-6.
Email 11/07/2023	S. Laud (Credo)	R. Branham (Amphenol)	Requesting an update regarding Amphenol's response to Credo's September 2023 letter. EX1021, 5.
Email 11/15/2023	R. Branham (Amphenol)	S. Laud (Credo)	- Amphenol stating that Credo's "request for Amphenol to share extensive product information with a competitor is unreasonable, particularly given the nebulous nature of your concerns." - Amphenol also stating that "[n]onetheless, we think that sharing some information about Amphenol products would allay Credo's concerns" and that "Amphenol is willing to loan you a sample of a representative product and associated documentation, if you (on behalf of yourself, your firm and Credo) are willing to retain all provided materials and any information derived from the provided materials in confidence to be used solely for the analysis mentioned in your letter" once Credo "confirm[s] for us that there is no issue with the representative product or detail Credo's concerns with respect to that product." EX1021, 4.
Email 11/21/2023	S. Laud (Credo)	R. Branham (Amphenol)	Credo "accept[ing] confidentiality terms... as long as (1) [Credo] can share the cable and documentation with other outside counsel and technical consultants to the extent

Date	From	To	Subject Matter
			necessary for the infringement analysis and (2) [Amphenol] provide a list of all AECs Amphenol is offering so [Credo] can understand how the sample you provide is representative of others.” EX1021, 3-4.
Email 12/01/2023	R. Branham (Amphenol)	S. Laud (Credo)	Amphenol remaining “open to [Credo] sharing Amphenol information” based on Credo providing Amphenol a list. EX1021, 2-3.
Email 12/13/2023	S. Laud (Credo)	R. Branham (Amphenol)	Credo stating that it will “share Amphenol information with Dan Krueger of Ramey LLP, one of Credo’s outside patent counsel” and requesting that Amphenol “send a sample and documentation for” three identified Amphenol products “includ[ing] the datasheet, schematics, and CMIS register map.” EX1021, 2.
Email 12/23/2023	R. Branham (Amphenol)	S. Laud (Credo)	Amphenol expressing concern that “Dan [Krueger] is involved in prosecuting Credo patents,” that “[s]haring information with Dan carries an unreasonable risk that it would be used for patent prosecution,” and asking Credo to “designate someone else who is better positioned to limit use of the information to only the contemplated analysis such that we can move forward.” EX1021, 1.