

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

TESLA, INC.,
Petitioner,

v.

INTELLECTUAL VENTURES II LLC,
Patent Owner.

IPR2025-00340
U.S. Patent No. 6,894,639

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

Table of Contents

Petitioner’s Exhibit List	4
I. Introduction	7
II. Discretionary denial under <i>Fintiv</i> is not warranted.....	9
A. Factor 1 is neutral: No evidence regarding a stay.	10
B. Factor 2 favors institution: The parallel proceeding trial date is speculative.	10
C. Factor 3 favors institution: Minimal relevant investment and expeditious filing.	16
D. Factor 4 strongly favors institution: Petitioner’s “ <i>Sotera Plus</i> ” stipulation.	20
E. Factor 5 is neutral: Petitioner is a defendant in the parallel litigation. ...	23
F. Factor 6 favors institution: The merits of the Petition remain strong because Patent Owner’s arguments are deficient on their face.....	23
G. The <i>Fintiv</i> factors as a whole favor institution.....	25
III. The additional factors set forth in the Director Memo favor institution.....	25
A. The Merits of the Petition are Strong.	26
1. Petitioner is not taking inconsistent claim construction positions.	26
2. The Petition’s grounds show that the challenged claims are obvious.....	30
B. The lack of settled expectations favors institution.	32
C. The Petition properly relies on evidence-supported expert testimony in accordance with Federal Circuit precedent.	37
1. Federal Circuit precedent requires the perspective of a POSITA.....	38

Opposition to Patent Owner’s Request for Discretionary Denial
IPR2025-00340 (U.S. Patent 6,894,639)

2.	Dr. Rodriguez’s testimony is fully supported by evidence under <i>Xerox</i>	41
3.	The Petition Properly Relies on Expert Testimony to Explain the Cited References from the Perspective of a POSITA.	43
D.	Compelling economic and national security interests favor institution.	44
E.	The long-rescinded secrecy order has no impact on national security or the obviousness of the challenged claims.	48
IV.	The new Interim Process should not govern the decision to institute.	49
V.	Conclusion.....	54
	Certificate of Service	56

Opposition to Patent Owner's Request for Discretionary Denial
IPR2025-00340 (U.S. Patent 6,894,639)

PETITIONER'S EXHIBIT LIST

Ex.1001	U.S. Patent No. 6,894,639 to Katz ("639 patent")
Ex.1002	Prosecution File History of U.S. Patent No. 6,894,639
Ex.1003	Declaration of Jeffrey J. Rodriguez, Ph.D. under 37 C.F.R. § 1.68
Ex.1004	<i>Curriculum Vitae</i> of Jeffrey J. Rodriguez, Ph.D.
Ex.1005	U.S. Patent No. 5,027,413 to Barnard ("Barnard")
Ex.1006	PCT Application Publication WO 90/16038 to Lawrence ("Lawrence")
Ex.1007	U.S. Patent No. 5,341,439 to Hsu ("Hsu")
Ex.1008	U.S. Patent No. 5,341,142 to Reis et al. ("Reis")
Ex.1009	"Bayesian and neural network pattern recognition : a theoretical connection and empirical results with handwritten characters" ("Lee")
Ex.1010	IV's Complaint, <i>Intellectual Ventures II, LLC v. Tesla, Inc.</i> , No. 6:24-cv-188-ADA (WDTX)
Ex.1011	Proposed Scheduling Order, <i>Intellectual Ventures II, LLC v. Tesla, Inc.</i> , No. 6:24-cv-188-ADA (WDTX)
Ex.1012	Statistics on District Court Timing
Ex.1013	Interim Procedure for Discretionary Denials in AIA Parallel District Court Litigation, June 21, 2022
Ex.1014	IV's Preliminary Infringement Contentions, <i>Intellectual Ventures II, LLC v. Tesla, Inc.</i> , No. 6:24-cv-188-ADA (WDTX)
Ex.1015	"Artificial Neural Networks for Automatic Target Recognition" ("Rogers"), Published in Proceedings of SPIE Conference on Applications of Artificial Neural Networks, Orlando, Florida April 1990 (Paper Number 1294-01)
Ex.1016	U.S. Patent No. 4,881,270 ("Knecht")
Ex.1017	U.S. Patent No. 5,010,512 ("Hartstein")

Opposition to Patent Owner’s Request for Discretionary Denial
IPR2025-00340 (U.S. Patent 6,894,639)

Ex.1018- Ex.1052	Reserved
Ex.1053 (NEW)	Statistics on District Court Timing (Mar. 31, 2025)
Ex.1054 (NEW)	WDTX 2024 Statistical Public Report, available at https://www.txwd.uscourts.gov/court-information/district-statistics/
Ex.1055 (NEW)	Amended Order Assigning the Business of the Court (Judge Moses, Jan. 31, 2025)
Ex.1056 (NEW)	LexMachina docket report
Ex.1057 (NEW)	LexMachina docket report
Ex.1058 (NEW)	“Albright Worried Multipatent Trials Ask Too Much Of Jurors,” Law360 (Dec. 18, 2020), at https://www.law360.com/articles/1337976/albright-worriedmultipatent-trials-ask-too-much-of-jurors
Ex.1059 (NEW)	Bifurcation Order – Videolabs, Inc. v. Asustek Computer, Inc. 6:22-cv-00720-ADA (WDTX)
Ex.1060 (NEW)	Joint Claim Construction Statement, <i>Intellectual Ventures II, LLC v. Tesla, Inc.</i>, 1:24-cv-884-ADA, ECF No. 37 (WDTX) (March 28, 2025)
Ex.1061 (NEW)	“The economic contributions of Tesla to the California economy, 2018–2021,” IHS Markit (Oct. 2022), available at https://digitalassets.tesla.com/tesla-contents/image/upload/Tesla-California-Economic-Impact-Final-Report-October-2022
Ex.1062 (NEW)	“Tesla’s ‘American-made’ cars won’t get hit as hard by the auto tariffs,” CNN.com, https://www.cnn.com/2025/03/29/cars/american-made-cars-tesla-auto-tariffs/index.html, retrieved Apr. 14, 2025

Opposition to Patent Owner’s Request for Discretionary Denial
IPR2025-00340 (U.S. Patent 6,894,639)

Ex.1063 (NEW)	“An Assessment of the Impact of the Inter Partes Review Process under the Patent Trial and Appeal Board on the US Economy,” The Perryman Group, available at https://www.perrymangroup.com/publications/report/2021/9/23/an-assessment-of-the-potential-impact-of-expanding-inter-partes-review-ipr-under-the-america-invents-act-on-the-us-economy/
Ex.1064 (NEW)	’639 Patent Assignment Recordation
Ex.1065 (NEW)	“Tesla’s California Footprint,” https://www.tesla.com/blog/teslas-california-footprint (retrieved Apr. 25, 2025)
Ex.1066 (NEW)	“FAQs for Interim Processes for PTAB Workload Management,” available at https://www.uspto.gov/patents/ptab/faqs/interim-processes-workload-management (retrieved May 13, 2025).
Ex.1067 (NEW)	Notice of <i>Sotera</i> Plus Stipulation for Defendant Tesla, Inc., <i>Intellectual Ventures II, LLC v. Tesla, Inc.</i>, 1:24-cv-884-ADA, ECF No. 66 (WDTX) (June 24, 2025)
Ex.1068 (NEW)	Order Granting Motion to Extend Time to File Infringement Contentions, <i>Intellectual Ventures II, LLC v. Tesla, Inc.</i>, 1:24-cv-884-ADA, ECF No. 60 (WDTX) (May 27, 2025)
Ex.1069 (NEW)	Judge Albright Patent FAQ, available at https://www.txwd.uscourts.gov/for-attorneys/judge-albright-courtroom-faq/ (retrieved June 2, 2025)
Ex.1070 (NEW)	Tesla, Inc.’s Opening Claim Construction Brief, <i>Intellectual Ventures II, LLC v. Tesla, Inc.</i>, 1:24-cv-884-ADA, ECF No. 26 (WDTX) (January 9, 2025)

I. Introduction

Petitioner Tesla, Inc. opposes Patent Owner’s Request for Discretionary Denial (Paper 6, “PO Brief”) because denial is inappropriate under *Fintiv* and the additional factors set forth in the Acting Director’s “Interim Processes for PTAB Workload Management” (“Director Memo”).

With respect to *Fintiv*, this IPR is a “true alternative” to the parallel litigation in view of Petitioner’s “*Sotera Plus*” stipulation that eliminates all potential overlap—including the overlap identified by the Acting Director in *Motorola Solutions*: “combinations of the prior art asserted in these proceedings with unpublished system prior art.” *Motorola Solutions Inc. v. Stellar, LLC*. IPR2024-01205, Paper 19 at 3-4 (Mar. 28, 2025). Further, at institution, the district court will not have issued any orders for the ’639 patent on invalidity issues that may be addressed in this IPR, which “weighs against” denial under *Fintiv*. Moreover, trial in the parallel litigation is unlikely to happen prior to a Final Written Decision, in view of (i) the median time to trial for this Court, (ii) Judge Albright’s move to Austin and corresponding 40% increase in docket size, and (iii) the sheer number of patents asserted (eleven) by Patent Owner against Petitioner.

The additional factors listed in the Director Memo similarly weigh against denial. Intellectual Ventures (“IV”) has no compelling interest or expectation sufficient to avoid PTAB review under the circumstances here. This IPR is an

appropriate use of Office resources.

The Board should review the merits of Petitioner's challenge to the '639 patent because the Board is better suited than the district court to review a large number of patents across a wide array of subject matter areas. IV has asserted the '639 patent against Petitioner in district court litigation along with ten other patents spanning a diverse range of subject matter. For this same reason, the Director recently denied IV's request for discretionary denial in seven parallel IPRs involving patents in the same district court proceeding. *See, e.g., Tesla, Inc. v. Intellectual Ventures II LLC*, IPR2025-00217, Paper 9 (June 13, 2025) (rejecting Patent Owner's request for discretionary denial of six IPRs). The Director should do the same here. In the related IPRs, the Director determined that "[t]he large number and vast scope of the patents asserted in the district court litigation [] weighs against discretionary denial, as the Board is better suited to review a large number of patents involving diverse subject matter." *Id.* at 3. The same reasoning applies here.

IV also alleges it notified Tesla of the '639 patent in a letter dated August 2020—but IV ***did not own the '639 patent at that time***. IV only acquired the '639 patent one month prior to asserting it against Tesla in early 2024, which was almost two years after the '639 patent expired—and thus it can have no settled expectations. Moreover, the United States has a compelling economic and national

security interest in ensuring Tesla, a leading domestic manufacturer and innovator, has access to cost-effective PTAB review when accused of infringement. Congress passed the AIA specifically to curtail counterproductive litigation costs. Denial is also not warranted based upon Petitioner's use of expert testimony. Such testimony is appropriate (even necessary) under Federal Circuit precedent and supported by evidence.

The merits of the Petition are strong and warrant review by a merits panel. The Petition sets forth clear and well-supported obviousness grounds that show there is nothing new about the challenged claims of the '639 patent. Patent Owner's arguments ignore the teachings of the prior art actually relied upon in the Petition.

For these reasons and the reasons below, Petitioner respectfully requests that the Director decline to exercise her discretion to deny and advance the Petition to a merits panel for consideration.

II. Discretionary denial under *Fintiv* is not warranted.

The *Fintiv* factors, considered as a whole, do not warrant denial. *Apple Inc. v. Fintiv, Inc.*, IPR2020-00019, Paper 11 (Mar. 20, 2020) (precedential). Every factor either favors institution or is neutral—where Factor 4 weighs ***strongly*** toward institution given Petitioner's "*Sotera Plus*" stipulation that is broader than the scope of estoppel under 35 U.S.C. § 315(e)(2).

A. Factor 1 is neutral: No evidence regarding a stay.

No motion to stay has been filed, so the Board should not infer the outcome of such a motion. *Sand Revolution II, LLC v. Continental Intermodal Group – Trucking LLC*, IPR2019-01393, Paper 24 at 7 (June 16, 2020) (informative). This factor is thus neutral.

B. Factor 2 favors institution: The parallel proceeding trial date is speculative.

Factor 2 favors institution, or, at worst, is neutral. Trial is currently set for May 14, 2026, which is three months before the projected due date for the Final Written Decision on August 25, 2026. Ex.2003, 4. Because the trial date is close to the projected Final Written Decision, other factors—in particular Petitioner's "Sotera Plus" stipulation (see below)—outweigh Factor 2. For example, the Board declined to discretionarily deny institution when the petitioner's *Sotera* stipulation—narrower than the stipulation presented here—outweighed a five-month gap between the scheduled trial date and final written decision date. *See, e.g., Samsung Electronics Co. Ltd. v. Headwater Research LLC*, IPR2024-01407, Paper 9 at 6, 8 (March 20, 2025).

Moreover, the limited three-month gap between the trial date and Final Written Decision (as opposed to the six-month trial gap in *Fintiv*) "increases the possibility here that any unforeseen delay in the district court proceeding could cause the order of those two events to reverse." *Cisco Sys., Inc. v. Portsmouth*

Network Corp., IPR2024-00503, Paper 7 at 12-13 (Aug. 6, 2024) (citing *Fintiv* at

9). Such delay is likely here for several reasons.

First, the scheduled trial date of May 14, 2026, is inconsistent with the median time-to-trial in WDTX of 33.4 months—which instead puts trial in January of 2027, **after** the projected final written decision on August 25, 2026. *See* Ex.1053, 5; *see also Amazon.com, Inc. v. NL Giken Inc.*, IPR2025-00250, Paper 14 at 2 (May 16, 2025) (Acting Director finding discretionary denial inappropriate because “time-to-trial statistics suggest trial would not begin until” after the projected final written decision date); USPTO Guidance of March 24, 2025 (“Boalick Memo”) (“the Board may consider...median time-to-trial statistics”). It is likely the scheduled trial date will move more in line with the median time-to-trial statistics because Judge Albright is moving his chambers from the Waco division (a division with a limited docket) to the Austin division (a division with a much heavier docket). *See* Ex.1054 (WDTX 2024 Statistical Report), 1 (809 case filings in Waco, 1,765 case filings in Austin).

Moreover, Judge Albright's docket is further expanding beyond the median. For example, until the vacancy in Waco is filled, Judge Albright will retain his **entire** Waco docket while taking on **40%** of the docket in the Austin division, as ordered by Chief Judge Moses on January 31st:

Item VIII

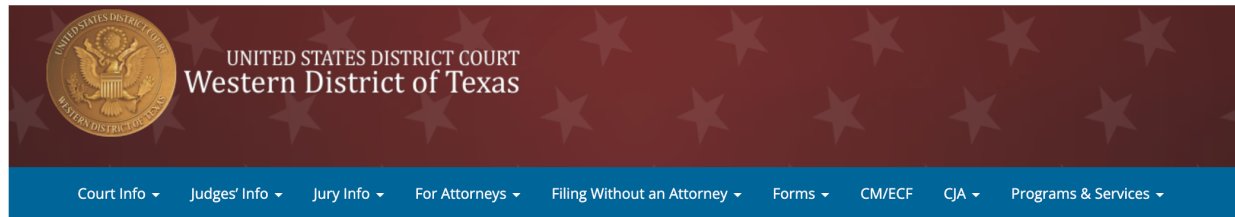
U.S. District Judge Alan D. Albright:

- (a) Forty percent (40%) of the civil docket in the Austin Division;
- (b) Forty percent (40%) of the criminal docket in the Austin Division;
- (c) One hundred percent (100%) of the civil docket in the Waco Division, with the exception of patent cases;
- (d) One hundred percent (100%) of the criminal docket in the Waco Division;
- (e) Patent cases will be assigned as ordered on May 30, 2024, in the Court's Order Assigning the Business of the Court as it Relates to Patent Cases; and
- (f) All other proceedings in the Waco Division.

Ex.1055, 3. Further, in the four months since this order, at least 382 cases have been reassigned to Judge Albright, including 61 patent cases. *See* Ex.1056 (LexMachina report); Ex.1057 (LexMachina report). At least 16 of these 61 new patent cases on Judge Albright's docket were filed in the same month as the present parallel litigation or before. *See* Ex.1057. The sheer number, type, and timing of the new cases reassigned to Judge Albright will inevitably lead to delay, likely pushing the trial date in the instant parallel litigation past the Final Written Decision in this IPR.

In a co-pending IPR proceeding (IPR2025-00343) involving a different patent asserted against Petitioner in the parallel litigation, Patent Owner cited "Judge Albright Patent FAQ" to allege that the trial date of the parallel litigation would only be moved in "extreme circumstances." IPR2025-00343, Paper 7 at 3-4. Petitioner submits that the addition of at least 382 cases to Judge Albright's docket

likely qualifies as an extreme circumstance. The cited FAQ was also posted in “September 2020,” which is five years before Judge Albright’s move to the Austin division. The “September 2020” date omitted by Patent Owner for this portion of the FAQ is shown below.



Judge Albright Patent FAQ

— Miscellaneous

+ May 2020: Venue discovery and response deadline

+ July 2020: Rule 11 and Sanctions Motions

+ September 2020: Mediation

— September 2020: Trial Date

Q. When will the Court set the trial date?

A. At or before the CMC, the Court will provide an estimated trial date based on the number of patents-in-suit, the complexity of the case, etc. To the extent the parties would like to reset the trial date, the parties should raise that at the end of the Markman hearing. After the trial date is set, the Court will not move the trial date except in extreme situations. To help the parties prepare for trial, the Court is available on very short notice to help the parties resolve issues or provide guidance that can help the case move forward. The Court is also willing, if circumstances permit, to reduce the time it has to review summary judgment and Daubert motions. To the extent a party believes that the circumstances warrant continuing the trial date, the parties are directed to contact the Court to request a telephonic hearing.

Ex.1069, 1.

Second, there are *eleven* patents asserted in the parallel litigation.¹ Ex.1010,

¹ Patent Owner originally asserted twelve patents, but the parties jointly moved to dismiss with prejudice their respective claims for U.S. Patent No. 8,898,395. The court granted the motion on May 16, 2025. On June 24, 2025, the Board

2. These eleven patents span *nine* different families that vary widely in subject matter:

Patent	Title	Family
6,894,639	Generalized hebbian learning for principal component analysis and automatic target recognition, systems and method	A
7,181,743	Resource allocation decision function for resource management architecture and corresponding programs therefor	B
7,336,805	Docking assistant	C
7,916,180	Simultaneous multiple field of view digital cameras	D
9,232,158	Large dynamic range cameras	D
9,706,500	Power control in a wireless network	E
10,136,416	Communicating on a shared channel in a wireless network	F
10,292,138	Determining buffer occupancy and selecting data for transmission on a radio bearer	G
10,952,153	Power control in a wireless network	E
11,206,670	Communication in a wireless network using restricted bandwidths	H
11,664,889	Communications in a wireless network	I

The *eleven patents* asserted by Patent Owner against Petitioner spanning *nine different families* involve a diverse and complex range of subject matter better suited for the Board's review than resolving invalidity issues in district court. The Director recently denied Patent Owner's request for discretionary denial

terminated the IPR involving the '395 patent based on the parties' joint motion.

IPR2025-00638, Paper 7.

in seven parallel IPRs involving patents asserted by IV against Petitioner in the same district court proceeding, and should do the same here. *See, e.g., Tesla, Inc. v. Intellectual Ventures II LLC*, IPR2025-00217, Paper 9 (June 13, 2025); *Tesla, Inc. v. The United States of America as Represented by the Secretary of the Navy and Intellectual Ventures II LLC*, IPR2025-00341, Paper 12 (June 13, 2025). The Director indicated that “the complex and diverse litigation proceeding [between Patent Owner and Petitioner] tip the balance against discretionary denial.” IPR2025-00217, Paper 9 at 2; IPR2025-00341, Paper 12 at 2. The Director determined that “[t]he large number and vast scope of the patents asserted in the district court litigation [] weighs against discretionary denial, as the Board is better suited to review a large number of patents involving diverse subject matter.” IPR2025-00217, Paper 9 at 3; IPR2025-00341, Paper 12 at 2-3. The same considerations are present here. For the same reasons, the Director should not discretionary deny this IPR proceeding because the Board is better suited to resolve the invalidity issues for the large number of patents asserted by Patent Owner and challenged by Petitioner.

Further, the notion that a jury will be asked to consider eleven patents across nine families in a single trial starting on May 14, 2026 is unreasonable. Indeed, Judge Albright has publicly stated that he does not think it is “fair to have a jury trying to handle more than two or three patents at a time.” Ex.1058; *see also*

Ex.1059 (example Albright bifurcation order). A trial for any given patent of the eleven asserted is therefore likely to occur later than the currently scheduled date.

Accordingly, Factor 2 favors institution in view of the minimal trial gap and inevitable delay in the parallel proceeding due to (i) Judge Albright's move and corresponding docket increase and (ii) the large number and scope of asserted patents.

C. Factor 3 favors institution: Minimal relevant investment and expeditious filing.

Factor 3 favors institution because, at institution, investment by the court and parties will have been minimal as to the activities pertinent to *Fintiv*. Patent Owner's Request for Discretionary Denial includes a laundry list of activities allegedly showing substantial investment, but very few relate to invalidity of the '639 patent.² See PO Brief, 6-7. Under *Fintiv*, "[i]f, at the time of the institution decision, the district court has not issued orders *related to the patent at issue in the petition*, this fact weighs against exercising discretion to deny institution." *Fintiv*, 10. Here, even if the court issues a *Markman* order prior to institution, the court will have resolved only indefiniteness challenges to claims 1 and 7 of the '639 patent. See Ex.1060 (Joint Claim Construction Statement), 2 (identifying

² At Patent Owner's request, Judge Albright extended Patent Owner's due date for serving final infringement contentions by one month to June 23, 2025. Ex.1068.

Petitioner's assertion that the terms (1) "said target feature information" in claim 1 and (2) "said feature information" in dependent claim 7 are indefinite under 35 U.S.C. § 112); Ex.1070 (Petitioner's opening claim construction brief), 8-11 (identifying that these claim terms are indefinite for "lack[ing] antecedent basis and can potentially be interpreted in multiple ways"). When addressing investment under *Fintiv* Factor 3, the Board has found that when "[t]he only claim-construction issue disputed at the district court...[is] related to indefiniteness," "the investment in claim construction does not represent any overlap with this proceeding." *TCL Elecs. Holdings Ltd. v. Maxell, Ltd.*, IPR2025-00120, Paper 9 at 7 (May 20, 2025). Accordingly, because the only claim construction issues for the '639 patent relate to indefiniteness, there is no overlap with this IPR. Ex.1060, 2; see 35 U.S.C. § 311(b) (a petitioner may challenge claims in an IPR "only on a ground that could be raised under section 102 or 103...."); *Samsung Elecs. Am., Inc. v. Prisia Eng'g Corp.*, 948 F.3d 1342, 1350 (Fed. Cir. 2020) ("[T]he Board may not cancel claims for indefiniteness in an IPR proceeding."). Under *Fintiv* Factor 3, the lack of an order addressing invalidity issues for the '639 patent that may be raised in this IPR weighs against discretionary denial.

Further, *Sotera* explains that, even after *Markman* is complete, "much other work remains in the parallel proceeding as it relates to invalidity," including "fact discovery," "expert reports," and "substantive motion practice." *Sotera Wireless*,

Inc. v. Masimo Corp., IPR2020-01019, Paper 12 at 16 (Dec. 1, 2020) (precedential as to § II.A). The informative *Fintiv* and *Sand* decisions similarly observe that even after *Markman*, much work remains. *See Apple Inc. v. Fintiv, Inc.*, IPR2020-00019, Paper 15 at 13-14 (May 13, 2020) (informative) (“We recognize that much work remains in this case as it relates to invalidity: fact discovery is in its early stages, with document production ongoing and depositions just getting underway, expert reports are not yet due, and substantive motion practice is yet to come.”); *Sand Revolution*, 10 (“But aside from the district court’s *Markman* Order, much of the district court’s investment relates to ancillary matters untethered to the validity issue itself.”).

Here, although the *Markman* hearing occurred prior to institution, much work will remain in the eight months between institution (August 25, 2025) and the scheduled trial date (May 14, 2026). Fact discovery will be in its early stages and will not close until November 6, 2025. Ex.2003, 3. Opening expert reports are not due until November 20, 2025, and expert discovery will not close until January 15, 2026. *Id.* Substantive motion practice, similarly, will be yet to come. *Id.* at 3-4. Accordingly, because much of the investment relevant to issues of invalidity will occur after institution, this factor weighs against denial. Notably, a recent PTAB panel analyzing *Fintiv* under the Boalick Memo came to the same conclusion under similar facts. *See Bio-Rad Labs., Inc. v. California Inst. of Tech.*, IPR2024-

01451, Paper 11 at 9-10 (Mar. 27, 2025) (finding that Factor 3 “weighs against exercising our discretion to deny institution” where the *Markman* hearing has been held but “much more work remains, including, expert reports, expert discovery, expert depositions, and pretrial motions and disclosures”).

This factor also weighs against denial because “the petitioner filed the petition expeditiously.” *Fintiv*, 11. As such, “this fact [] weigh[s] against exercising the authority to deny institution.” *Id.* Here, Petitioner worked diligently to file the instant petition five months after receiving Patent Owner’s Preliminary Infringement Contentions and approximately three months prior to the statutory deadline of April 15, 2025. At the time of filing, the parallel litigation was in its early stages and claim construction briefing had yet to begin. Petitioner submits that its diligence in filing is more than reasonable—especially given that it prepared and filed *eleven* IPR petitions challenging *121* claims in the same time frame. *See Sotera*, 17 (finding Petitioner’s explanation “reasonable” in part because “of the large number of patents and claims challenged in this and Petitioner’s [eight] other related petitions for *inter partes* review”). Several post-Boalick Memo panels have agreed that similar diligence is reasonable and weighs against denial. *See Samsung Elecs. Co., Ltd. v. Mullen Industries LLC*, IPR2024-01472, Paper 9 at 10 (Mar. 31, 2025) (“Petitioner’s diligence in filing its Petition (a) less than five months after receiving Patent Owner’s infringement contentions

and (b) prior to the parties briefing claim construction issues weighs against exercising discretionary denial.”); *Samsung Elecs. Co., Ltd. v. Headwater Research LLC*, IPR2024-01396, Paper 13 at 7 (Apr. 1, 2025) (“[W]e find Petitioner’s diligence in filing its Petition approximately 4 months before it was statutorily required to do so, and while litigation is in its early stages, weighs against denial, not for it.”).

Accordingly, Factor 3 weighs in favor of institution because (i) no substantive court order related to IPR invalidity issues of the ’639 patent will have issued prior to institution, and (ii) Petitioner’s diligence in filing this petition.

D. Factor 4 strongly favors institution: Petitioner’s “Sotera Plus” stipulation.

Factor 4 weighs strongly in favor of institution because Petitioner has made a stipulation ***broader*** than a *Sotera* stipulation in district court. *See* Ex.1067, 1-2 (stipulation filed in parallel district court proceeding). Specifically, Petitioner stipulated that:

[I]f the PTAB institutes an IPR (and does not subsequently vacate institution) in response to Defendant’s petition against Plaintiff’s U.S. Patent No. 6,894,639 (IPR2025-00340), Defendant will not pursue in this litigation against the claims challenged in IPR2025-00340, (i) the specific grounds raised in IPR2025-00340, (ii) any other grounds that could have reasonably been raised before the PTAB in that instituted proceeding (i.e., any ground that could have reasonably been raised under §§ 102 or 103 on

the basis of prior art patents or printed publications), or (iii) any ground based on a combination of system prior art and the references asserted as part of a ground raised in IPR2025-00340, as reflected in the table summarizing the Statutory Grounds for Challenges on page 10 of the Petition.³

Petitioner's broad stipulation goes beyond the scope of estoppel under 35

³ To the extent Patent Owner alleges Petitioner should have submitted a stipulation at some earlier point in time, Petitioner notes that it filed the Petition prior to the creation of the bifurcated process described in the Director Memo. At the time of filing on January 3, 2025, PTAB precedent provided that the "appropriate time for a petitioner to offer a stipulation related to the *Fintiv* factor 4 analysis is prior to the Board's decision of whether to institute review." *NXP USA, Inc. v. Impinj, Inc.*, IPR2021-01556, Paper 13 at 4 (Sept. 7, 2022) (de-designated precedential Apr. 25, 2025); *see also Nike, Inc. v. ADIDAS AG*, 955 F.3d 45, 52 (Fed. Cir. 2020) ("In interpreting the APA's notice provisions in the context of IPR proceedings, we have cautioned that an agency may not change theories in midstream without giving respondents reasonable notice of the change and the opportunity to present argument under the new theory.") (citation and quotation marks omitted).

Petitioner does not oppose the Director granting Patent Owner a reply for the limited purpose of addressing the above stipulation.

U.S.C. § 315(e)(2). *See Ingenico Inc. v. IOENGINE, LLC*, 136 F.4th 1354, 1367 (Fed. Cir. 2025) (“IPR estoppel did not preclude Ingenico from relying on the DiskOnKey System with related printed publications at trial...”). This stipulation also specifically addresses the Director’s comment regarding remaining overlap in *Motorola Solutions* (combinations of system art with the references asserted in the IPR). IPR2024-01205, Paper 19 at 3-4 (“Petitioner’s invalidity arguments in the district court are more expansive and include combinations of the prior art asserted in these proceedings with unpublished system prior art, which Petitioner’s [*Sotera*] stipulation is not likely to moot.”). Petitioner respectfully submits that this expansive stipulation outweighs all other *Fintiv* factors as it conclusively eliminates overlap with invalidity issues raised in the parallel proceeding. The Director credited Petitioner’s broad *Sotera Plus* stipulation in denying Patent Owner’s request for discretionary denial. *See, e.g., Tesla, Inc. v. Intellectual Ventures II LLC*, IPR2025-00217, Paper 9 at 2 (June 13, 2025); *Tesla, Inc. v. The United States of America as Represented by the Secretary of the Navy and Intellectual Ventures II LLC*, IPR2025-00341, Paper 12 at 2 (June 13, 2025).

Accordingly, Factor 4 weighs heavily in favor of institution because of Petitioner’s *Sotera Plus* stipulation.

E. Factor 5 is neutral: Petitioner is a defendant in the parallel litigation.

Petitioner is a defendant in the parallel litigation. That is true of most IPR petitioners, making this factor neutral. *See HP Inc. v. Slingshot Printing LLC*, IPR2020-01084, Paper 13 at 9 (Jan. 14, 2021); *see also NVIDIA Corp. v. Invensas Corp.*, IPR2020-00603, Paper 11 at 23 (Sept. 3, 2020) (this factor weighs against discretionary denial where the district court trial and IPR final written decision are expected “around the same time”).

F. Factor 6 favors institution: The merits of the Petition remain strong because Patent Owner's arguments are deficient on their face.

Factor 6 favors institution because the Petition plainly shows that the '639 patent claims no more than well-known subject matter. Patent Owner alleges that the merits of the grounds are “weak,” but its argument is based on two faulty premises.

First, Patent Owner incorrectly asserts that “Petitioner failed to inform the Board that it was contending in the Parallel Litigation that the challenged claims were indefinite,” when in fact the Petition explicitly notes multiple times that “Petitioner reserves the right to raise challenges under 35 U.S.C. § 112 in other forums.” PO Brief, 15; Pet., 23 n.3, 36 n.4. The merits of the Petition remain strong and are unaffected by challenges raised in the Parallel Litigation that Petitioner is statutorily prohibited from raising in this IPR.

Second, Patent Owner incorrectly asserts “the Petition is deficient” in “articulating ‘[h]ow the challenged claim is to be construed,’” and “explain[ing] ‘[h]ow the construed claim is unpatentable.’” PO Brief, 17. More specifically, Patent Owner argues “[t]he Petition glosses over the requirement that the feature information selected for the distinguishing the target be ‘target specific.’” PO Brief, 18. This is not true. The Petition explicitly sets forth how the claims are being construed (Pet., 10 (citing Ex.1003, ¶¶ 38-39)) and then walks through in detail how Barnard uses data statistics to select target specific feature information to distinguish specific targets from background clutter. Pet., 16-22, 29-32. As discussed in III.A below, Patent Owner’s argument improperly focuses on specific portions of Barnard out of context while ignoring the teachings of Barnard relied upon in the Petition. When the full teachings of the prior art as set forth in the Petition are considered, the merits are strong. The grounds in the Petition should be considered by a merits panel.

G. The *Fintiv* factors as a whole favor institution.

In summary, each *Fintiv* factor is either neutral or weighs against denial:

Factor	Weight	Reason
1 (stay)	neutral	no evidence of a stay
2 (trial gap)	against denial	3-month gap as scheduled; trial before FWD under time-to-trial stats; Judge Albright move and court congestion will create delay
3 (investment)	against denial	no court orders for '639 patent addressing IPR invalidity issues; expeditious filing
4 (overlap)	strongly against denial	<i>Sotera Plus</i> stipulation; key issues not resolved by district court
5 (same party)	neutral	Petitioner is defendant
6 (merits)	against denial	merits remain strong in light of PO's failure to address the full teachings of the prior art as set forth in the Petition

Because the *Fintiv* factors as a whole favor institution, the Director should not discretionarily deny institution under § 314(a).

III. The additional factors set forth in the Director Memo favor institution.

The Director Memo invites the parties to “address all relevant [discretionary denial] considerations” and provides a list of potential factors. Director Memo, 2-3.

Each of the potential factors favors institution:

- Patent Owner cannot reasonably hold settled expectations regarding the '639 patent based on one year of ownership and lack of ownership at the time of the August 2020 licensing demand letter.
- The unpatentability challenges in the Petition are particularly strong regardless of a secrecy order that (i) expired 20 years ago, (ii) was

unrelated to patentability, and (iii) was opposed by the applicant.

- The United States has a compelling economic and national security interest in ensuring Tesla, a leading domestic manufacturer and innovator, has access to cost-effective AIA proceedings.
- The Petition relies upon expert testimony to the extent necessary under Federal Circuit precedent, and such expert testimony is supported by evidence as required under 37 CFR § 42.65 and *Xerox*.
- Neither the PTAB nor any other forum has adjudicated the validity of the '639 patent post-issuance.
- Patent Owner does not allege any relevant changes in the law or new judicial precedent since issuance of the claims.

Several of these factors are of particular importance to the Director's discretion and are addressed individually below.

A. The Merits of the Petition are Strong.

Patent Owner argues that the Petition's grounds are "weak" and that Petitioner is taking inconsistent claim positions in this IPR proceeding and the parallel district court proceeding. PO Brief, 14-19, 22-33. Both of these arguments are wrong.

1. Petitioner is not taking inconsistent claim construction positions.

Patent Owner argues that Petitioner "failed" to inform the Board that Petitioner was taking "inconsistent" claim construction positions. PO Brief, 15-17. In addition, Patent Owner argues that Petitioner did not identify how the

challenged claims are to be construed. PO Brief, 17-19. These arguments lack merit.

In the Petition, Petitioner construed all claim terms according to their plain and ordinary meaning. Pet., 10 (citing Ex.1003, ¶¶ 38-39). In the parallel litigation, Petitioner contends that the term “said target feature information” in claim 1 and the term “said feature information” in dependent claim 7 are indefinite for lack of antecedent basis. Ex.1060, 2; Ex.1070, 8-11; PO Resp., 15-16 (citing Ex.2004, 227-228). Contrary to Patent Owner's argument, Petitioner is not taking inconsistent claim construction positions, and expressly informed the Board how Petitioner, supported by the testimony of Dr. Rodriguez, is interpreting these terms according to their plain and ordinary meaning in this IPR, in compliance with 37 C.F.R. § 42.104(b)(3).

First, as discussed in Section II.C above, Petitioner may not raise indefiniteness challenges in this IPR. *See* 35 U.S.C. § 311(b) (a petitioner may challenge claims in an IPR “only on a ground that could be raised under section 102 or 103....”); *Samsung Elecs.*, 948 F.3d at 1350 (Fed. Cir. 2020) (“[T]he Board may not cancel claims for indefiniteness in an IPR proceeding.”). Therefore, Petitioner is not taking an inconsistent claim construction position in this proceeding. Instead, Petitioner is pursuing a claim construction position in district court that it is statutorily prevented from raising in this IPR proceeding. Further,

even if Petitioner's claim construction positions here and in the parallel litigation

are viewed as "inconsistent," the Board has made clear that its "rules do not necessarily prohibit petitioners from taking inconsistent claim construction positions before the Board and a district court." *Cambridge Mobile Telematics, Inc. v. Sfara, Inc.*, IPR2024-00952, Paper 12 at 8 (Dec. 13, 2024) (designated informative Mar. 20, 2025). Rather, *Cambridge* provides that if a petitioner is taking different claim construction positions in the IPR and parallel litigation, the petitioner should explain "why the inconsistent positions are warranted." *Id.* Petitioner did that.

Specifically, in the analysis of limitation [1.3] in the Petition, Petitioner informed the Board how it is interpreting the claim term "*said target feature information*" "for purposes of the unpatentability grounds presented [in the Petition]":

As Dr. Rodriguez explains, [1.3] recites "*target feature information*," not "*target specific feature information*" as used in [1.2]. Ex.1003, ¶79. Consistent with Dr. Rodriguez, the Petition assumes, for purposes of the unpatentability grounds presented herein, that "*said target feature information*" recited in [1.3] is the "*target specific feature information*" recited in [1.2], as well as [1.4] and [1.5].

Pet., 23 n. 3.

Similarly, Petitioner noted the antecedent basis issue for "*said feature information*" in claim 7, and informed the Board that "[c]onsistent with Dr.

Rodriguez, the Petition assumes, for purposes of the unpatentability grounds presented herein, that “*feature information*” as recited in ... [7.0] is the “*target specific feature information*” recited in claim 1.” Pet. 36 n. 4 (emphasis original). Notably, Patent Owner ignores these explanations for limitation [1.3] and claim 7 despite their presence in the Petition. *See generally* PO Brief, 15-19.

Second, Patent Owner's argument that Petitioner “failed” to inform the Board of different claim construction positions is simply wrong. When identifying its interpretation of “*target feature information*” in limitation [1.3] and “*said feature information*” in claim 7 for purposes of the unpatentability challenges raised in the IPR, Petitioner expressly informed the Board that “Petitioner reserves the right to raise challenges under 35 U.S.C. § 112 in other forums.” Pet., 23 n. 3; *see also id.* 36 n. 4 (same).

Third, contrary to Patent Owner's argument, Petitioner explained how all claim terms should be construed (plain and ordinary meaning; Pet., 10) and explained how it is interpreting “*said target feature information*” in limitation [1.3] and “*said feature information*” of claim 7 in the prior art analysis of these limitations, despite the antecedent basis issues for these terms. Pet., 23 n. 3, 36 n. 4. Therefore, Petitioner explained [h]ow the challenged claim is to be construed,” and “[h]ow the construed claim is unpatentable,” in compliance with 37 C.F.R. §§

42.104(b)(3)-(4).

2. The Petition's grounds show that the challenged claims are obvious.

The Petition shows that all the limitations of the challenged claims are obvious over the cited prior art when the claims are construed according to their plain and ordinary meaning.

Patent Owner asserts that Barnard does not disclose selecting “target specific features” and that Petitioner’s expert attempts to fill “gaps” through unsupported or conclusory testimony. PO Brief, 22-33. In making these arguments, Patent Owner improperly focuses on specific portions of Barnard out of context while ignoring the additional teachings of Barnard relied upon in the Petition.

First, the Petition explains in detail how Barnard uses data statistics to select target specific feature information utilized to distinguish specific targets from background clutter. Pet., 16-22, 29-32. For example, the Petition explains how Barnard utilizes “width of the statistical distributions,” “progressive means,” “variances,” and/or “statistical information” to select target specific feature information. Pet. 17-19. The Petition then explains how the selected target specific feature information is utilized to distinguish specific targets from background clutter, citing to Barnard’s explicitly teaching that “[a] *selection of features can usually be found ... which effectively separates target objects from background objects.*” Pet. 18 (citing Ex.1005, 5:13-17). Because Barnard teaches selecting

target specific feature information to distinguish specific targets from background clutter, there are no gaps in the mapping of the prior art to the claim language for Dr. Rodriguez to fill.

Second, to the extent Patent Owner is arguing that “target specific feature information” as used in independent claim 1 requires distinguishing specific targets from other *targets*, such an interpretation is contrary to the claim language. Claim 1 explicitly recites “select[ing] target specific feature information to distinguish specific targets ***from background clutter***” and “using said target specific feature information to distinguish specific targets ***from background clutter***.” Ex.1001, 12:5-15. Accordingly, the language of claim 1 requires the target specific feature information be utilized to distinguish specific targets from background clutter, not other targets. This understanding is confirmed by claim differentiation. Claim 7, which depends from claim 1, recites that the target specific feature information “is further used to ***distinguish two target classes or a plurality of target classes from one another***.” Ex.1001, 12:28-30. It necessarily follows that claim 1 does not require the target specific feature information to distinguish the specific targets from other targets. Otherwise, claim 7 would not further limit claim 1.

Third, even if “target specific feature information” is improperly interpreted to require distinguishing specific targets from other *targets* in independent claim 1 (it should not be), the Petition explains how Barnard teaches this as well. For

example, the Petition discusses how “Fig. 2 of Barnard shows an example of a real-world application of using a set of selected features and an associated target detection threshold to distinguish specific targets, such as a point source 15 and a sea-skimming missile 16, from background clutter, such as wave crests 17,” and “also illustrates that the specific targets—such as a point source 15 and a sea-skimming missile 16—are *distinguished from other potential targets—such a seagull 18 or a ship.*” Pet., 31 (citing Ex.1003, ¶ 99; Ex.1005, 1:24-36, 3:34-41, Fig. 2), *see also* Pet., 37-39.

Accordingly, the merits of the Petition are strong, and should be considered by a merits panel.

B. The lack of settled expectations favors institution.

Patent Owner asserts that because the ’639 patent (i) “expired almost 3 years ago...after having been in force for 17 years” and (ii) was included, along with twenty other patents, in a letter to Petitioner in August 2020 (“the Letter”; Ex.2005), these considerations somehow create “settled expectations.” PO Brief, 34-36. The expiration of the ’639 patent, the Letter and surrounding facts—including the fact that IV did not own the ’639 patent at the time the patent expired or it sent the Letter—plainly demonstrate the lack of settled expectations.

First, IV cannot have any settled expectations in a patent that it acquired *after* the patent expired and mere weeks before asserting it in litigation against

Tesla. IV indicates that the '639 patent expired on May 5, 2022. PO Brief, 34.

However, IV acquired the '639 patent in March 2024 (Ex.1064, 1), over *twenty-two months after the patent expired*. Patent Owner has not explained how it can somehow have settled expectations in a patent that it acquired after the patent was expired. Moreover, it appears that IV acquired the '639 patent solely for the purpose of monetizing it through litigation, which significantly decreases any potential relevance of the “settled expectations” factor. IV asserted the '639 patent against Petitioner approximately two weeks after acquiring the patent. Ex.1010, 58 (Complaint filed April 12, 2024); Ex.1064, 1 (IV acquires '639 patent March 28, 2024). Further, IV does not specify exactly which expectations it has that are “settled,” but the '639 patent was never previously asserted in litigation and IV cannot reasonably have any expectations that the '639 patent will not be subject to IPR. Its own litigation strategy destroys any purported expectations. IV asserted the '639 patent against Petitioner two weeks after acquiring the already expired patent, predictably triggering an IPR challenge. This is unlike the facts in the recent *Dabico* decision in which the patent owner had not asserted the challenged patent and thus likely had expectations that it would not be challenged in IPR. *Dabico Airport Solutions v. AXA Power APS*, IPR2025-00408, Paper 21 (June 18, 2025) (“the Office is disinclined to disturb the settled expectations of Patent Owner in this instance”). Here, the Office cannot “disturb” the settled expectations of

Patent Owner because Patent Owner has no such expectations to disturb. *Id.* at 3.

Moreover, the AIA does not restrict IPR to “newer” patents; any patent over the age of 9 months may be challenged. 35 U.S.C. § 311. Patent Owner can thus have no expectation of avoiding IPR after the expiration of the '639 patent.

Second, IV cannot have any settled expectations based on the Letter. As an initial matter, the Letter asserts “IV owns several thousand U.S. Patents” and “vigorously defends the inventions embodied in IV’s patents.” Ex.2005, 2, 4. However, IV did not own the '639 patent at the time it sent the Letter to Tesla. Instead, IV acquired the '639 patent in March 2024—*over 3.5 years after the Letter*. Ex.2005, 2 (Letter sent August 7, 2020); Ex.1064, 1 (Assignment Abstract showing transfer of the '639 patent to IV in March 2024). When the Letter was sent to Tesla on August 7, 2020, either “Raytheon Company” or “OL Security Limited Liability Company”⁴ owned the '639 patent, not IV. Ex.1064, 1-2. The

⁴ There is a gap in the ownership chain of the '639 patent in the Assignment Abstract (Ex.1064). The '639 patent was assigned to Raytheon Company in June 2001. Ex.1064, 1-2. The '639 patent was assigned by OL Security Limited Liability Company to IV in March 2024. Ex.1064, 1. However, there is no recorded transfer of the '639 patent from Raytheon Company to OL Security Limited Liability Company.

Letter fails to explain why the '639 patent—not owned by IV at that time—was included in a list of IV's patents. And IV's brief fails to explain why IV could have formed *any* expectations around a patent it did not own. For example, IV argues that "Petitioner waited more than four years to file this IPR challenging the '639 Patent," and that this alleged "delay" favors denial under the "settled expectations" factor. PO Brief, 34. IV, however, could not have reasonably formed any settled expectations based upon Tesla's alleged "delay" when IV did not own the '639 patent for most of the "delay." Likewise, Tesla could not have formed any expectations regarding the Letter's licensing demands when IV did not have a legitimate right to enforce the '639 patent at the time of the Letter. The Director has determined that discretionary denial is not appropriate when the petitioner did not expect enforcement of an expired patent. *See Globus Medical, Inc. v. Spinelogik, Inc.*, IPR2025-00225, Paper 8 at 2 (June 12, 2025). That is the same situation here *and* IV did not own the '639 patent at the time of its licensing demand letter.

Moreover, the '639 patent was one of *twenty-one different patents* identified in the Letter. Ex.2005, 2-4. To the extent IV is suggesting that such a letter requires immediately filing IPRs on all twenty-one patents, such a suggestion is irrational and inconsistent with the very purpose of the AIA. Congress intentionally set the statutory bar for filing an IPR at one year from *service of a complaint* to let cases

develop and avoid the filing of unnecessary IPRs on irrelevant claims and issues.

157 Cong. Rec. S5429 (daily ed. Sept. 8, 2011) (“The purpose of giving defendants a full year to seek IPR is to ‘afford defendants a reasonable opportunity to identify and understand the patent claims that are relevant to the litigation.’”); *see also* 35 U.S.C. § 315(b) (petitioners have one year to file an IPR petition after service of a complaint).

Here, IV's district court Complaint demonstrates Tesla was justified in *not* rushing to file IPRs on all the patents identified in the Letter. The Complaint includes *only three* of the twenty-one patents included in the Letter. *See* Ex.1010 and Ex.2005 (only the '639 patent and U.S. Patent Nos. 7,181,743 and 7,336,805 included in both the Letter and the Complaint). Pursuing IPRs on all the patents in the Letter would have been a waste of the resources of the Board and the parties. Instead, consistent with the intentions of the AIA, Tesla worked expeditiously to file the Petition challenging select claims of the '639 patent once the asserted claims were identified in August 2024, avoiding the filing of potentially numerous unnecessary IPRs. *See* Ex.1014 (infringement contentions cover pleading).

IV also argues that the Letter provided Tesla notice which claims may be asserted. PO Brief, 34-35. The Letter, however, identified only claim 1 of the '639 patent, as IV noted. *Id.* at 34 (citing Ex.2005, 20-24). Tesla did not know which claims it was accused of infringing until it received IV's infringement contentions

in August 2024. Pet., 79 (citing Ex.1014). Upon learning that IV was asserting claims 1 and 5-7 of the '639 patent, Tesla then challenged claims 1-7 in this Petition.

With respect to expectations of validity, no tribunal has ever adjudicated the validity of the '639 patent after it issued. Moreover, IV itself elected to assert the '639 patent, which should have given rise to the possibility of an IPR challenge. The '639 patent is not entitled to a presumption of validity in this proceeding.

Accordingly, IV's failure to allege any settled expectations and the lack of any reasonable basis for such expectations favors institution.

C. The Petition properly relies on evidence-supported expert testimony in accordance with Federal Circuit precedent.

Patent Owner's assertion that Petitioner's reliance on expert evidence is somehow detrimental contradicts Federal Circuit precedent. The foundational decisions upon which patent law is based—*Phillips*, *KSR*, etc.—require the adjudicator to evaluate the patent and prior art from the perspective of a POSITA. That perspective is established with evidence, often in the form of expert declarations. Attorney argument is insufficient. Here, Petitioner's expert, Dr. Jeffrey Rodriguez, provides that perspective with testimony supported by the disclosure of the references in accordance with 37 CFR § 42.65 and *Xerox Corp. v. Bytemark, Inc.*, IPR2022-00624, Paper 9 (Aug. 24, 2022) (precedential).

1. Federal Circuit precedent requires the perspective of a POSITA.

It is well established that patent claims are construed based on the understanding of a POSITA. *Phillips v. AWH Corp.*, 415 F.3d 1303, 1313 (Fed. Cir. 2005) (“We have made clear, moreover, that the ordinary and customary meaning of a claim term is the meaning that the term would have to a person of ordinary skill in the art in question at the time of the invention, i.e., as of the effective filing date of the patent application.”) (citing *Innova/Pure Water, Inc. v. Safari Water Filtration Systems, Inc.*, 381 F.3d 1111, 1116 (Fed. Cir. 2004) (“A court construing a patent claim seeks to accord a claim the meaning it would have to a person of ordinary skill in the art at the time of the invention.”)); *Home Diagnostics, Inc. v. LifeScan, Inc.*, 381 F.3d 1352, 1358 (Fed. Cir. 2004) (“customary meaning” refers to the “customary meaning in [the] art field”); *Ferguson Beauregard/Logic Controls v. Mega Sys., LLC*, 350 F.3d 1327, 1338 (Fed. Cir. 2003) (claim terms “are examined through the viewing glass of a person skilled in the art”); see also *PC Connector Solutions LLC v. SmartDisk Corp.*, 406 F.3d 1359, 1363 (Fed. Cir. 2005) (meaning of claim “must be interpreted as of [the] effective filing date” of the patent application); *Schering Corp. v. Amgen Inc.*, 222 F.3d 1347, 1353 (Fed. Cir. 2000) (same)).

Obviousness grounds are likewise evaluated from the perspective of a POSITA. *KSR Int’l Co. v. Teleflex Inc.*, 550 U.S. 398, 417 (2007) (“If a person of

ordinary skill can implement a predictable variation, § 103 likely bars its patentability. For the same reason, if a technique has been used to improve one device, and a person of ordinary skill in the art would recognize that it would improve similar devices in the same way, using the technique is obvious unless its actual application is beyond his or her skill.”), 418 (“[I]t can be important to identify a reason that would have prompted a person of ordinary skill in the relevant field to combine the elements in the way the claimed new invention does.”), 421 (“A person of ordinary skill is also a person of ordinary creativity, not an automaton.”).

The Federal Circuit has also made it clear that attorney argument alone is not evidence and should be given little weight. *Icon Health & Fitness, Inc. v. Strava, Inc.*, 849 F.3d 1034, 1043 (Fed. Cir. 2017) (“Attorney argument is not evidence.”) (citing *Gemtron Corp. v. Saint-Gobain Corp.*, 572 F.3d 1371, 1380 (Fed. Cir. 2009) (“[U]nsworn attorney argument . . . is not evidence and cannot rebut . . . other admitted evidence . . .”)); see also *Elbit Sys. Of Am., LLC, v. Thales Visionix, Inc.*, 881 F.3d 1354, 1359 (Fed. Cir. 2018) (“Elbit fails to present any evidence supporting this contention beyond attorney argument . . . and ‘[a]ttorney argument is not evidence’ and cannot rebut other admitted evidence.”). Because attorney argument is not evidence, expert testimony is *essential* to properly support IPR claim construction and obviousness positions that are evaluated from the

perspective of a POSITA. The Board recently confirmed this: “It is well settled that mere attorney argument unsupported by factual evidence is entitled no probative value.” *PLR Worldwide Sales LTD. v. Flip Phone Games, Inc.*, IPR2024-00209, Paper 28 at 32 (April 24, 2025).

The Petition presents and relies upon the testimony of Dr. Rodriguez as required. *See* Petition, 12-77 (relying on testimony of Dr. Rodriguez to support obviousness grounds). The unpatentability grounds set forth in the Petition are fully supported by the references themselves— Dr. Rodriguez’s testimony serves to confirm, support, and explain the disclosures of the references from the perspective of a POSITA. *See id.*

Importantly, Dr. Rodriguez was a POSITA as of the critical date of the ’639 patent (Ex.1003, ¶¶ 4-12, 16-19), and his testimony is supported by corroborating evidence in the form of the disclosure of the references relied upon in the unpatentability grounds (e.g., Barnard, Lawrence, and Knecht). *See generally*, Ex.1003. Further still, Dr. Rodriguez repeatedly provides technical reasoning to support his statements and understandings of the references. *See generally*, Ex.1003.

Moreover, the Federal Circuit has recognized that “when the technology is complex and ‘beyond the comprehension of laypersons,’ expert testimony is ‘sometimes essential.’” *Synopsys, Inc. v. Mentor Graphics Corp.*, 814 F.3d 1309,

1320 (Fed. Cir. 2016) (internal quotations removed), *overruled on other grounds* by *Aqua Prods., Inc. v. Matal*, 872 F.3d 1290, 1296 n.1 (Fed. Cir. 2017) (en banc); *see also Perfect Web Techs., Inc. v. InfoUSA, Inc.*, 587 F.3d 1324, 1330 (Fed. Cir. 2009) (“If the relevant technology were complex, the court might require expert opinions.”). This is precisely the situation here. Dr. Rodriguez’s expertise is utilized to explain complicated concepts relevant to the ’639 patent and to provide detailed explanations regarding how a POSITA would have understood the technical descriptions found in the ’639 patent and the prior art references (*see, e.g.,* Ex.1003, ¶¶ 32-36, 40-47, 54-266). Dr. Rodriguez’s testimony serves these essential purposes and is a strength of the Petition.

2. Dr. Rodriguez’s testimony is fully supported by evidence under *Xerox*.

Patent Owner fails to even allege that Dr. Rodriguez’s testimony is not supported by evidence or lacks technical reasoning. Nor could it—Dr. Rodriguez’s testimony is fully supported by extensive underlying evidence including specific quotes from the references relied upon in the unpatentability grounds and provides technical reasoning, including explaining how Barnard *us[es] said target specific feature information to distinguish specific targets from background clutter* by “effectively separat[ing] target objects from background objects” to distinguish specific targets from background clutter in incoming picture signals. Ex.1005, 5:13-17; *see* Ex.1003, ¶¶96-101.

Patent Owner argues that “the Petition relies heavily on a 114-page expert declaration (EX1003) comprising 182 paragraphs,” and contends that the length of Dr. Rodriguez’s is somehow “well beyond what is appropriate.” PO Brief., 22-23. Other than providing this conclusory and baseless comment, Patent Owner does not explain how the length of Dr. Rodriguez’s is “well beyond what is appropriate” for an expert declaration. Rather than rely on some arbitrarily defined “length” requirement, the Director should instead focus on whether Dr. Rodriguez’s declaration is supported by evidence in compliance with *Xerox*—it does. *Xerox* focuses on whether the expert testimony cites to “supporting evidence or provide[s] any technical reasoning.” *Xerox*, 15. Expert testimony is only afforded less weight if it “adds little to the conclusory assertion for which it is offered to support.” *Id.* Here, as illustrated above and in the declaration itself, Dr. Rodriguez’s testimony is fully supported by evidence. Further, Patent Owner’s reference to the length of Dr. Rodriguez’s declaration has no bearing on whether the Petition impermissibly relies on expert testimony. Instead, Dr. Rodriguez’s fulsome explanations that are supported by objective evidence are a “feature, not a bug of his testimony.” *Tesla, Inc. v. Charge Fusion Tech., LLC*, IPR2025-00032, Paper 11 at 39 (May 19, 2025) (“To the contrary, that [Petitioner’s expert] Mr. Andrews’s supports his extensive explanations of his opinions with citations to dozens of pieces of objective evidence, ***is a feature, not a bug of his testimony.***”).

Mr. Andrews, and Petitioner by extension, leave virtually none of the substance of his testimony unsupported by objective evidence, *a practice that we applaud.*").

Accordingly, the Petition's proper reliance on evidence-backed expert testimony to support the unpatentability grounds favors institution.

3. The Petition Properly Relies on Expert Testimony to Explain the Cited References from the Perspective of a POSITA.

Patent Owner asserts that the Petition's grounds "hinge[] on an improper use of expert testimony to rewrite both the challenged claims and the cited prior art." PO Brief, 23, *see also id.*, 24-33. However, there are no gaps in the mapping of the prior art to the claim language. Instead, the Petition sets forth clear and well-supported obviousness grounds, mapping the teachings of the prior art references to each of the different claim limitations with citations to the references themselves as well as Dr. Rodriguez's declaration to confirm, support, and explain the disclosures of the references from the perspective of a POSITA. *See generally* Pet; Ex.1003, ¶¶ 54-266.

The alleged "gaps" Patent Owner identifies are based on its improper narrowing of the claims, ignoring the explicit disclosure of the references, and disregarding a fundamental principle of patent law. As discussed above in III.A, Patent Owner's assertion that "target specific feature information" as used in independent claim 1 requires distinguishing specific targets from other *targets* (i) is

contrary to the claim language; (ii) attempts to read in limitations from claim 7; and (iii) ignores the explicit teachings of Barnard explaining real-world applications in which “specific targets—such as a point source 15 and a sea-skimming missile 16—are *distinguished from other potential targets—such a seagull 18 or a ship.*” Pet., 31 (citing Ex.1003, ¶ 99; Ex.1005, 1:24-36, 3:34-41, Fig. 2. Similarly, Patent Owner’s assertion that there is “absence of any disclosure of using data statistics to select target-specific feature information” ignores Barnard’s explicit disclosure of generating a “target detection threshold” for a set of features “from the statistical information” that is located “at the intersection of the two probability surfaces, i.e. where the probabilities of an object being a target or a background point are equal, that is, in accordance with Baye's criterion.” Pet. 23-24 (citing Ex.1005, 5:59-66); *see* Ex.1003, ¶¶ 80-86. These attempts to mislead the Board are improper. The grounds in the Petition are fully supported by the disclosure of the references themselves and do not rely on any impermissible gap filling based on Dr. Rodriguez’s testimony.

D. Compelling economic and national security interests favor institution.

The United States has compelling economic and national security interests in affording Petitioner Tesla the opportunity to challenge the '639 patent under the more efficient IPR framework. For example, according to a recent Executive order, “[a] nation’s ability to produce domestically is the bedrock of its *national and*

economic security” and “[t]he need to maintain robust and resilient domestic manufacturing capacity is *particularly acute in certain advanced industrial sectors like automobiles*” Exec. Order No. 14257, 90 Fed. Reg. 15041, 15043 (April 2, 2025). As a leading domestic automobile manufacturer, Tesla should be free to invest and innovate without being encumbered by defending expensive patent litigations where the asserted patents are likely invalid. A right to seek review of such patents before the U.S. Patent and Trademark Office ensures Tesla can continue its mission to accelerate the world’s transition to sustainable energy and that the United States leads in that mission.

Tesla has invested billions of dollars developing high-tech engineering and manufacturing facilities across the U.S., including in Texas, Nevada, and California. These investments have led to significant, positive economic impacts for the associated areas. Ex.1061 (IHS Markit economic report), 3 (“The contributions of Tesla to the California economy” in 2021 included \$16.6 billion in economic activity, \$10.3 billion in gross state product (GSP), ~80,500 jobs, +30% higher average wage, \$10.3 billion in total wages, and ~\$1.0 billion in federal, state, and local taxes.) (cited by Ex.1065 (“Tesla’s California Footprint” on Tesla.com)). And, by design, Tesla’s vehicles are “[a]s ‘American-made’ as you can get,” and have topped “Car[s].com’s American-Made Index since 2021.” Ex.1062, 1-2 (“Tesla’s manufacturing, both as location of final assembly and the

componentry of the vehicles, is all as high (a score on the index) as you could possibly get for a US-made vehicle.”).

This type of advanced domestic engineering and manufacturing capacity “is critical to U.S. national security.” Exec. Order No. 14257, 90 Fed. Reg. 15041, 15043 (April 2, 2025) (“Both my first Administration in 2017, and the Biden Administration in 2022, recognized that increasing domestic manufacturing is critical to U.S. national security.”). Domestic engineering and manufacturing not only provide good jobs for American workers but advance important technological developments and associated knowhow domestically. *See id.* (“Increased reliance on foreign producers for goods also has compromised U.S. economic security by rendering U.S. supply chains vulnerable to geopolitical disruption and supply shocks.”), 15044 (“Importantly, U.S. manufacturing is the main engine of innovation in the United States, responsible for 55 percent of all patents and 70 percent of all research and development (R&D) spending.”).

It is vital that companies, like Tesla, making huge investments in the U.S. are provided an effective and efficient mechanism for challenging invalid patents asserted against them. Congress created the AIA for this purpose. 77 Fed. Reg. 48612, 48612 (Aug. 14, 2012) (“The purpose of the AIA ... is to establish a more efficient and streamlined patent system that will improve patent quality and limit unnecessary and counterproductive litigation costs.”); *see also Gen. Plastic Indus.*

Co., Ltd. v. Canon Kabushiki Kaisha, IPR2016-01357, Paper 19 at 16-17 (Sept. 6, 2017) (“[W]e recognize that an objective of the AIA is to provide an effective and efficient alternative to district court litigation.”). AIA proceedings create cost savings for its participants via “reductions in legal fees incurred and the greater probability of a settlement or early-stage resolution.” Ex.1063 (study of AIA economic benefits), 2, 8 (“[T]he total economic benefits of *inter partes* reviews resulting in stay of litigation in district court included **an increase in US business activity of \$1.87 billion in gross product and 8,530 job-years of employment**”; “In situations where an *inter partes* review was conducted parallel to a district court proceeding, the economic benefits of [*inter partes* reviews] include estimated **increases of \$135.4 million in US gross product and 617 person-years of employment**”).

Telsa is seeking review of the '639 patent consistent with the purpose of AIA post-grant proceedings: efficient, technically reliable assessments of validity. And Tesla's broad *Sotera Plus* stipulation makes the IPR a true district court alternative. Denying Tesla access to IPR in this scenario would frustrate the purpose of the AIA and deny Tesla the specific economic benefits envisioned by Congress.

For these reasons, compelling economic and national security interests favor institution (or, at the very least, consideration of the Petition by a merits panel).

E. The long-rescinded secrecy order has no impact on national security or the obviousness of the challenged claims.

The existence of a long-rescinded secrecy order during the prosecution of the '639 patent has no bearing on the obviousness of the claims or whether they should be reviewed by the Board now. During prosecution, the applicant *objected to the secrecy order* and argued that the “identical material covered in the patent application” had previously been disclosed at the Neural Networks for Computing Conference in April 1992. Ex.1002, 108. Yet the secrecy order was renewed numerous times, notwithstanding applicant's own admission that the subject matter had *already been publicly disclosed*. See Ex.1002, 70-71, 73-82, 86-91, 93-98, 100-101. These renewals were not based on whether the subject matter of the application was known or otherwise in the public domain but rather based on concerns related solely to national security interests as determined by the Air Force. Ex.1002, 162; see 35 U.S.C. § 181 (prohibiting publication or granting of a patent where such disclosure “would be detrimental to the national security”).

Indeed, the secrecy order has no bearing on the patentability of the claims. Patent Owner's unsupported attorney arguments otherwise ignore that language used in the secrecy order and corresponding statute is unrelated to patentability and does not contemplate or address novelty or non-obviousness. The secrecy order was issued following a determination by the Air Force “to keep the *subject matter* secret”—not the claims. Ex.1002, 162-166. This was because, as Patent Owner

explains, “[t]he ‘639 Patent relates to the identification of *a target (e.g., a missile or a fighter jet) in radar samples*” and that “the Department of the Air Force ‘determined that this patent application discloses critical technology with *military or space application*, the unauthorized disclosure of which would be detrimental to the national security and which is subject to export control...” PO Brief, 21 (citing to Ex.1002, 162) (emphasis added). Patent Owner’s assertion in the parallel district court litigation that Petitioner’s vehicles with autopilot functionality infringe on the claims of the ‘639 patent (Ex.1014, 3) shows that Patent Owner is attempting to stretch the scope of the ‘639 patent to areas far beyond “the identification of a target (e.g., a missile or a fighter jet) in radar samples” for “military or space application[s]” that were the basis for the secrecy order.

And the long-rescinded secrecy order has no impact on the current national security interests discussed above. The secrecy order was rescinded in 2003, more than 20 years ago. Ex.1002, 70-71. Even if there were national security concerns associated with the ‘639 patent decades ago, those concerns have no impact in 2025 and beyond. Accordingly, the secrecy order that was only in effect during the prosecution of the ‘639 patent cannot outweigh the national security interests discussed in Section III.D above.

IV. The new Interim Process should not govern the decision to institute.

The above briefing addresses the USPTO’s most recent guidance on

institution as best as Petitioner understands it. But, for at least the reasons articulated below, Petitioner respectfully requests the USPTO Director to maintain the standards for institution in place at the time this Petition was filed, until such time as new guidance is issued following a notice and comment period, as required by the Administrative Procedure Act (“APA”).

Petitioner developed the Petition and corresponding litigation strategy based on the standards outlined in the June 21, 2022, Interim Procedure for Discretionary Denials issued by the Office (the “June 2022 Procedures”). After the Petition was filed, however, the USPTO rescinded the June 2022 Procedures and reverted to former procedures through a short posting on the USPTO website followed by the March 24, 2025 Memorandum of Chief Administrative Patent Judge Scott Boalick (the “Boalick Memo”). Two days later, on March 26, Acting Director Stewart issued a Memorandum (the “Director Memo”) introducing an entirely new “interim procedure” that bifurcates institution between “(i) discretionary considerations and (ii) merits and other non-discretionary statutory considerations.” Director Memo, 1. Under this new procedure, “the Director, in consultation with at least three PTAB judges” will determine whether discretionary denial is appropriate based on “all relevant considerations,” including several newly enumerated factors. *Id.* Three weeks after the Director Memo issued, the USPTO held an oral webcast setting forth additional substantive details of the new

interim procedure not found in the Director Memo. Then, eight days after the webcast, the USPTO posted on its website “FAQs for Interim Processes for PTAB Workload Management” with even more substantive details, some potentially in conflict with details provided during the oral webcast. Petitioner submits that the recission notice, the Boalick Memo, the Director Memo, the oral webcast, and the FAQs (together, the “Announcements”) do not satisfy the requisite statutory and constitutional obligations for new regulations.

By way of example, 35 U.S.C. § 316(a) mandates that “[t]he **Director shall prescribe regulations**” including regulations “(2) setting forth the standards for the showing of sufficient grounds to institute a review under section 314(a).” The Announcements fall short of 35 U.S.C. § 316(a) by:

- (1) Making changes to substantive rules or directives without going through notice-and-comment rulemaking, particularly given the agency’s representation that it will make any further changes to the institution process through notice-and-comment rulemaking. *See* 88 Fed. Reg. 24,503 (April 21, 2023). The Announcements violate the notice-and-comment requirements under the APA and are arbitrary and capricious.
- (2) Proposing considerations that lack clarity so that they fail to set “forth the standards for the showing of sufficient grounds to institute review.” 35 U.S.C. § 316(a). For example, many of the new “considerations” set forth in

the Director Memo lack basis in Federal Circuit or PTAB case law such that petitioners cannot anticipate how the Director will apply them. *See* Director Memo, 2-3 (“[s]ettled expectations,” “reliance on expert testimony,” “workload,” and “[c]ompelling economic, public health, or national security interests”).

- (3) Lacking a sufficiently reasoned explanation for the changes in the factors relevant to institution, including changes that directly contradict the agency’s prior guidance in the June 2022 Procedures—such as the controlling effect of a *Sotera* stipulation and the relevance of compelling merits. The reference to “workload needs of the PTAB” in the Announcements does not explain how the changes will aid that goal.⁵ *See Food & Drug Admin. v. Wages & White Lion Invs., L.L.C.*, 145 S. Ct. 898, 906 (2025) (explaining that when an agency changes position, it must “offer ‘good reasons for the new policy’”); *see also F.C.C. v. Fox Television Stations, Inc.*, 556 U.S. 502 (2009) (agency changing position must show “that the new policy is permissible under the statute, that there are good

⁵ The Director Memo does not contain any objective data illustrating how the workload of the PTAB has changed, or, if it has changed, how such change impacts the PTAB’s ability to meet its statutory obligations.

reasons for it, and that the agency believes it to be better, which the conscious change of course adequately indicates”).

- (4) Applying the Announcements retroactively to petitions filed prior to issuance of the new policies (such as in this case), thereby undermining stakeholders' reliance interests and prejudicing petitioners, including the Petitioner in this case, with respect to strategies between district court and USPTO proceedings. This is particularly true where the retroactive application of a new rule was not first subjected to notice-and-comment rulemaking under the Administrative Procedure, despite the agency's stated intent to follow such procedures. *See NetworkIP, LLC v. F.C.C.*, 548 F.3d 116, 122–23 (D.C. Cir. 2008).
- (5) Implementing the new bifurcated process without first collecting input from stakeholders or adequately apprising stakeholders of the logistics. The Director Memo lacks procedural details, and the later-created FAQs webpage that purportedly “controls the interim processes” is “frequently” updated. Ex.1066, 1 (encouraging stakeholders to “check back frequently for updates”). Further, there is no way for the parties to know who is designated to advise the Director and, thus, whether there are any conflicts of interest or other procedural concerns related to the process. *See, e.g.*, IPR2025-00250, Paper 14 at 1 (caption of Acting Director's decision on request for

discretionary denial listing only the Acting Director).

In the face of this non-exclusive list of deficiencies in the Announcements, Petitioner urges the Board and Director to consider whether to institute based on the standards articulated in the June 2022 Procedures until such time as the Board issues new regulations in accordance with 35 U.S.C. § 316 and the rulemaking procedures of the APA.⁶

V. Conclusion

For the above reasons, Petitioner respectfully requests that the Director refrain from exercising her discretion to deny this petition, and instead pass it to a merits panel for consideration.

Respectfully submitted,

Date: June 24, 2025

HAYNES AND BOONE, LLP
2801 N. Harwood Street, Ste 2300
Dallas, Texas 75201
Customer No. 27683

/Jonathan R. Bowser/
Jonathan R. Bowser
Lead Counsel for Petitioner
Registration No. 54,574

⁶ If the Office alters the “Interim Processes” before the decision on IV’s request for discretionary denial, Petitioner requests authorization to address such changes.

CERTIFICATE OF WORD COUNT

Pursuant to 37 C.F.R. § 42.24(d), Petitioner hereby certifies, in accordance with and reliance on the word count provided by the word-processing system used to prepare this Opposition, that the number of words in this paper is 10,637.

Pursuant to 37 C.F.R. § 42.24(d), this word count excludes the table of contents, table of authorities, mandatory notices under § 42.8, certificate of service, certificate of word count, appendix of exhibits, and any claim listing.

Date: June 24, 2025

HAYNES AND BOONE, LLP
2801 N. Harwood Street, Ste 2300
Dallas, Texas 75201

/Jonathan R. Bowser/
Jonathan R. Bowser
Lead Counsel for Petitioner
Registration No. 54,574

CERTIFICATE OF SERVICE

The undersigned certifies, under 37 C.F.R. § 42.6, that service was made on the Patent Owner as detailed below.

Date of service June 24, 2025

Manner of service Electronic Email: BTheiss@vklaw.com;
DGolub@vklaw.com; RODonnell@vklaw.com;
RLeonard@vklaw.com; rrigby@intven.com

Documents served **Petitioner's Opposition to Patent Owner's Request for Discretionary Denial; Exhibits 1053-1070.**

Persons served Brandon R. Theiss
Daniel H. Golub
Ryan W. O'Donnell
Robert D. Leonard
VOLPE KOENIG
30 S. 17th Street, Suite 1800
Philadelphia PA 19103

Russell J. Rigby
Intellectual Ventures II LLC
3150 139th Avenue Southeast Building 4
Bellevue, WA 98005

/Jonathan R. Bowser/
Jonathan R. Bowser
Lead Counsel for Petitioner
Registration No. 54,574