

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

TESLA, INC.,
Petitioner,

v.

INTELLECTUAL VENTURES II LLC,
Patent Owner.

IPR2025-00222
U.S. Patent No. 9,232,158

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

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Petitioner’s Exhibit List

Ex.1001	U.S. Pat. No. 9,232,158 to Olsen et al. (“the ’158 patent”)
Ex.1002	Prosecution History of U.S. Application No. 14/063,236 (issued as the ’158 patent)
Ex.1003	Declaration of R. Michael Guidash under 37 C.F.R. § 1.68
Ex.1004	Curriculum Vitae of R. Michael Guidash
Ex.1005	U.S. Pat. No. 6,611,289 to Yu et. al
Ex.1006	U.S. Pat. No. 7,365,780 to Miyazaki
Ex.1007	JP Application Publication No. JP2003-319231 to Matsushima (Certified English Translation + Declaration + Japanese)
Ex.1008	Eastman Kodak Company, Shutter Operations for CCD and CMOS Image Sensors, Application Note, MTD/PS-0259, Revision 1 (October 23, 2001) (retrieved from https://web.archive.org/web/20030419002619/http://www.kodak.com/global/plugins/acrobat/en/digital/ccd/applicationNotes/ShutterOperations.pdf)
Ex.1009	Eastman Kodak Company, Kodak CMOS Image Sensors White Paper (November 10, 2000) (retrieved from https://web.archive.org/web/20010611235410/http://www.kodak.com/US/plugins/acrobat/en/digital/ccd/cmos.pdf)
Ex.1010	Eastman Kodak Company, Kodak Digital Science KAC-0311 Image Sensor (August 5, 2002) (retrieved from https://web.archive.org/web/20030411152500/http://www.kodak.com/global/plugins/acrobat/en/digital/ccd/products/cmos/KAC-0311LongSpec.pdf)
Ex.1011	U.S. Pat. No. 7,733,414 to Kobayashi
Ex.1012	Dave Litwiller, “CCD vs. CMOS: Facts and Fiction, Photonics Spectra,” (January 2001)
Ex.1013	U.S. Application Pub. No. 2004/0239771 to Habe
Ex.1014	EP Application Pub. No. EP0858208 to Weldy et al.
Ex.1015	Memorandum in Support of Claim Construction Order, Intellectual Ventures I LLC et al. v. General Motors Company et al., 6:21-CV-1088 (WDTX), December 1st, 2022

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Ex.1016	Texas Instruments, TC255P 336- × 244-PIXEL CCD IMAGE SENSOR (March 2003)
Ex.1017	IV's Complaint, Intellectual Ventures II, LLC v. Tesla, Inc., No. 6:24-cv-188-ADA (WDTX)
Ex.1018	Proposed Scheduling Order, Intellectual Ventures II, LLC v. Tesla, Inc., No. 6:24-cv-188-ADA (WDTX)
Ex.1019	Statistics on District Court Timing
Ex.1020	Interim Procedure for Discretionary Denials in AIA Parallel District Court Litigation, June 21, 2022
Ex.1021	Eastman Kodak Company, Solid State Image Sensors Terminology, Application Note, DS 00-001, Revision 0 (December 8, 1994) (retrieved from https://web.archive.org/web/20030413064955/http://www.kodak.com/global/plugins/acrobat/en/digital/ccd/applicationNotes/terminology.pdf)
Ex.1022	U.S. Pat. No. 7,830,435 to Guidash
Ex.1023	Eastman Kodak Company, Charge Coupled Device (CCD) Image Sensors, CCD Primer, MTD/PS-0218, Revision No. 1 (May 29, 2001) (retrieved from https://web.archive.org/web/20030422183725/http://www.kodak.com/global/plugins/acrobat/en/digital/ccd/applicationNotes/chargeCoupledDevice.pdf)
Ex.1024	Szeliski, "Image Mosaicing for Tele-Reality Applications," (May 1994)
Ex.1025	Mann et al., "On Being 'Undigital' with Digital Cameras: Extending Dynamic Range By Combining Differently Exposed Pictures," (May 1995)
Ex.1026	Debevec et al., "Recovering High Dynamic Range Radiance Maps from Photographs," SIGGRAPH '97: Proceedings of the 24th annual conference on Computer graphics and interactive techniques, 369-378 (August 1997)
Ex.1027	PCT Pub. No. WO2001/010110 to Stark
Ex.1028	Yang et al., "A 640 512 CMOS Image Sensor with Ultrawide Dynamic Range Floating-Point Pixel-Level ADC," IEEE Journal

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	of Solid-State Circuits, VOL. 34, NO. 12 (December 1999)
Ex.1029	CCD Electronic Shutters, Interactive Java Tutorial, October 22, 2002 (retrieved from https://web.archive.org/web/20021028042044/https://micro.magnet.fsu.edu/primer/java/digitalimaging/ccd/shutter/index.html)
Ex.1030	Prosecution History of U.S. Application No. 11/212,803 (abandoned)
Ex.1031	Prosecution History of U.S. Application No. 11/788,122 (issued as U.S. Pat. No. 7,564,019)
Ex.1032	Prosecution History of U.S. Application No. 12/496,854 (issued as U.S. Pat. No. 8,198,574)
Ex.1033	Prosecution History of U.S. Application No. 13/465,229 (issued as U.S. Pat. No. 8,334,494)
Ex.1034	Prosecution History of U.S. Application No. 13/681,603 (issued as U.S. Pat. No. 8,598,504)
Ex.1035	Holst, CCD arrays, Cameras, and Displays, 2nd edition (1998)
Ex.1036	U.S. Pat. No. 4,831,403 to Ishida et al.
Ex.1037	U.S. Pat. No. 7,443,427 to Takayanagi
Ex.1038	U.S. Pat. No. 4,642,679 to Nagano
Ex.1039	e2v Technologies, CCD Sensors Technical Note: Glossary of Terms (2003)
Ex.1040	Ralph E. Jacobson et al., The Manual of Photography: photographic and digital imaging, 9th Edition (2000)
Ex.1041	U.S. Pat. No. 6,215,597 to Duncan et al.
Ex.1042	O'Donnell, The Practical Use of the Exposure Triangle (retrieved from https://creativeraw.com/practical-use-exposure-triangle-explained/)
Ex.1043	U.S. Pat. No. 2,953,983 to Larson
Ex.1044-1052	RESERVED
Ex.1053 (NEW)	Statistics on District Court Timing (Dec. 31, 2024)

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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
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/

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	<u>23/an-assessment-of-the-potential-impact-of-expanding-inter-partes-review-ipr-under-the-america-invents-act-on-the-us-economy/</u>
Ex.1064 (NEW)	’158 Patent Assignment Recordation
Ex.1065 (NEW)	“Tesla’s California Footprint,” <u>https://www.tesla.com/blog/teslas-california-footprint</u> (retrieved Apr. 25, 2025)
Ex.1066 (NEW)	“FAQs for Interim Processes for PTAB Workload Management,” available at <u>https://www.uspto.gov/patents/ptab/faqs/interim-processes-workload-management</u> (retrieved May 13, 2025).
Ex.1067 (NEW)	Notice of <i>Sotera Plus</i> Stipulation for Defendant Tesla, Inc., <i>Intellectual Ventures II, LLC v. Tesla, Inc.</i>, 1:24-cv-884-ADA, ECF No. 59 (WDTX) (May 27, 2025)
Ex.1068 (New)	Defendant’s Final Invalidity Contentions, <i>Intellectual Ventures II, LLC v. Tesla, Inc.</i>, 1:24-cv-884-ADA (WDTX) (May 22, 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 resolving a dispute related to the ’158 patent, 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. 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. Intellectual Ventures (“IV”) has no compelling interest or expectation sufficient to avoid PTAB review under the circumstances here. IV only recently acquired the ’158 patent in October 2021, apparently for the sole purpose of monetization. IV is similarly wrong that denial is warranted based upon Petitioner’s use of expert testimony. Such testimony is appropriate (even necessary) under Federal Circuit precedent and supported by evidence. Most importantly, the merits of the Petition are strong and warrant review by a merits panel, because (i) Patent Owner attacks the Petition’s Ground 1 (obvious over Matsushima) based entirely on fabricated “gaps” in Matsushima; and (ii) the Petition’s Ground 2 (obvious over Yu and Miyazaki) is not challenged by Patent Owner, underscoring the strength of 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 only less than two months before the projected due date for the Final Written Decision on July 9, 2026. Ex.2003, 4. Under *Fintiv*, “[i]f the court’s trial date is at or around the same time as the projected statutory deadline..., the decision whether to institute will likely implicate other factors.” *Fintiv* at 9. Here, because the trial date is around the same time as the projected Final Written Decision, other factors—in particular Petitioner’s “*Sotera Plus*” stipulation (see below)—outweigh Factor 2.

Moreover, the less-than-two-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 33.9 months—which instead puts trial in January of 2027, **after** the projected final written decision on July 9, 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); *see also* 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 three 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.

Second, there are *eleven* patents asserted in the parallel litigation.¹ Ex.1017,

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.

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 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 '158 patent. *See* PO Brief, 4-5. 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, there are no disputed claim terms associated with the '158 patent. *See* Ex.1060 (Joint Claim Construction Statement showing that the parties agree to the constructions of "integration time" and "an image capture device"), 2-3. Thus, under *Fintiv*, the lack of an order addressing a dispute related to the '158 patent 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 ten months between institution (July 9, 2025) and the scheduled trial date (May 14, 2026)—especially given that the district court will not construe any contested terms for the ’158 patent. 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 less than five months after receiving Patent Owner’s Preliminary Infringement Contentions and more than four 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 the ’158 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, 4 (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. 9,232,158 (IPR2025-00222), Defendant will not pursue in this litigation against the claims challenged in IPR2025-00222, (i) the specific grounds raised in IPR2025-00222, (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 IPR2025-00222, as reflected in the table summarizing the Statutory Grounds for Challenges on page 11 of the Petition.²

² 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 December 30, 2024, 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

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

U.S.C. § 315(e)(2). *See Ingenico Inc. v. IOENGINE, LLC*, No. 2023-1367, 2025 WL 1318188, at *8 (Fed. Cir. May 7, 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 Acting 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.

Also favoring institution under Factor 4 is the lack of substantial overlapping claims between the IPR and the parallel litigation. The Petition challenges **thirteen** claims (1-2, 4-5, 8-11, 13-16, 19), but only **two** claims (1 and 8) are currently asserted against Petitioner (*i.e.*, 85% of the challenged claims are not asserted). And only those two asserted claims are the subject of Petitioner's invalidity

limited purpose of addressing the above stipulation.

contentions in the parallel litigation. *See* Ex.1068, 6, 33 (asserting invalidity of “**the Asserted Claims of the Asserted Patents**”). Petitioner elected to challenge additional, unasserted claims for efficiency reasons—for example, to avoid filing a second IPR in the event Patent Owner asserts additional claims in the parallel litigation.

These additional challenged (but unasserted) claims differ in claim scope from the asserted claims, meaning that key issues in the Petition will not be resolved by the district court—further reducing the degree of overlap under Factor 4. *See Fintiv*, 13 (examining whether the district court will “resolve key issues in the petition”).

Accordingly, Factor 4 weighs heavily in favor of institution because of (i) Petitioner’s *Sotera* Plus stipulation and (ii) key issues in the Petition that will not be resolved by the district court.

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 '158 patent claims no more than well-known subject matter. Patent Owner alleges that “[t]he challenges set forth in the Petition are flawed” (PO Brief, 12), but does so by mischaracterizing Petition's reliance on expert testimony as improper, as detailed in Sections III.B.1 to III.B.2 below. Further, Patent Owner's argument that there are “gaps” in the Matsushima reference in the Petition's Ground 1 are deficient on their face and based on an incorrect characterization of Matsushima, as shown in Section III.B.3 below. In addition, Patent Owner fails to identify any specific flaw in the Petition's Ground 2 (obvious over Yu and Miyazaki), underscoring the strength of the Petition.

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	2-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 ’158 patent; expeditious filing
4 (overlap)	strongly against denial	<i>Sotera</i> Plus stipulation; key issues not resolved by district court
5 (same party)	neutral	Petitioner is defendant
6 (merits)	against denial	merits remain strong—there are no alleged “gaps”

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:³

³ Petitioner notes that Patent Owner did not request discretionary denial on the basis of 35 U.S.C. § 325(d) in the PO Brief, and thus Petitioner does not address that issue. *See* Ex.1066 (FAQs for Interim Processes), 6 (“If a patent owner wishes to raise any applicable bases for discretionary denial, it must do so in a discretionary denial brief.”).

- 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*.
- Patent Owner cannot reasonably allege settled expectations regarding the '158 patent based on only 3.5 years of ownership and the lack of any final determination on the invalidity of the '158 patent by the PTAB or any other forum.
- The unpatentability challenges in the Petition remain strong because Patent Owner's arguments are based on mischaracterization of Matsushima and Petition's proper reliance on expert testimony. Patent Owner fails to identify any specific flaw for Petition's Ground 2.
- 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. 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 '158 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 '158 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).

B. 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, Michael Guidash, provides that perspective with testimony supported by dozens of tertiary 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 Mr. Guidash as required. See Petition, 7-78 (relying on testimony of Mr. Guidash to support claim construction positions and obviousness grounds). The unpatentability grounds set forth in the Petition are fully supported by the references themselves—Mr. Guidash’s testimony serves to confirm, support, and explain the disclosures of the references from the perspective of a POSITA. See *id.*

Importantly, Mr. Guidash was a POSITA as of the critical date of the ’158

patent (Ex.1003, ¶¶ 3, 7-18), 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., Matsushima (Ex.1007), Yu (Ex.1005), Miyazaki (Ex.1006)) and one or more tertiary references (e.g., Exs.1008-1014, 1016, 1021-1029, 1035-1043). *See generally*, Ex.1003. Further still, Mr. Guidash 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. Mr. Guidash’s expertise is utilized to explain the technical background of complicated concepts relevant to the ’158 patent (*see, e.g.*, Ex.1003, ¶¶ 23-53). Mr. Guidash also provides detailed explanations regarding how a POSITA would have understood the technical descriptions found in the ’158 patent and the prior art references (*see, e.g.*, Ex.1003, ¶¶ 54-250). Mr. Guidash’s testimony serves these essential purposes and

is a strength of the Petition.

2. Mr. Guidash's testimony is fully supported by evidence under *Xerox*.

Patent Owner fails to even allege that Mr. Guidash's testimony is not supported by evidence or lacks technical reasoning. Nor could it—Mr. Guidash's testimony is fully supported by extensive underlying evidence including specific quotes from the references relied upon in the unpatentability grounds and a variety of tertiary references establishing the knowledge of a POSITA. For example, in the paragraphs identified by Patent Owner alone (¶¶23, 54-58, 60-61, 63-67, 69-71, 76-158, 160-197 and 200-250), Mr. Guidash relies upon at least a dozen different tertiary references to support his opinions:

- Kodak Shutter Operations Application Note (Ex.1008);
- Kodak CMOS Image Sensors White Paper (Ex.1009);
- Kodak Digital Science KAC-0311 Image Sensor (Ex.1010)
- CCD vs. CMOS: Facts and Fiction (Ex.1012)
- TC255P 336- × 244-PIXEL CCD IMAGE SENSOR (Ex.1016)
- U.S. Pat. No. 7,830,435 to Guidash (Ex.1022)
- Charge Coupled Device (CCD) Image Sensors, CCD Primer (Ex.1023)
- Image Mosaicing for Tele-Reality Applications (Ex.1024)
- On Being "Undigital" with Digital Cameras: Extending Dynamic Range By Combining Differently Exposed Pictures (Ex.1025)

- Recovering High Dynamic Range Radiance Maps from Photographs
(Ex.1026)
- PCT Pub. No. WO2001/010110 to Stark (Ex.1027)
- A 640 512 CMOS Image Sensor with Ultrawide Dynamic Range Floating-Point Pixel-Level ADC (Ex.1028)
- CCD Electronic Shutters, Interactive Java Tutorial (Ex.1029)
- CCD arrays, Cameras, and Displays (Ex.1035)
- U.S. Pat. No. 4,831,403 to Ishida (Ex.1036)
- U.S. Pat. No. 7443,427 to Takayanagi (Ex.1037)
- U.S. Pat. No. 4,642,679 to Nagano (Ex.1038)
- e2v Technologies, CCD Sensors Technical Note: Glossary of Terms
(Ex.1039)

Patent Owner's reliance on *Xerox* is misplaced. PO Brief, 12-13 (citing *Xerox* at 15-17). Patent Owner alleges that "Petition extensively relies on an expert declaration that largely parrots verbatim the wording of the Petition" and "[f]or these reasons, the declaration is entitled to little if any weight." PO Brief, 12. *Xerox*, however, does not stand for the proposition that a petition and supporting declaration cannot be similar. Instead, *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, Mr. Guidash’s testimony is fully supported by evidence. Further, Patent Owner’s reference to the length of Mr. Guidash’s declaration has no bearing on whether the Petition impermissibly relies on expert testimony. Patent Owner has not identified any Federal Circuit or PTAB precedent supporting such a position. Instead, Mr. Guidash’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 is strong—Patent Owner’s merits arguments are directed only at Ground 1 and are based entirely on “gaps” fabricated through a flawed three-step chain of reasoning.

The Petition’s Grounds are strong. Patent Owner’s arguments are directed only at Ground 1 (obvious over Matsushima) and are based entirely on fabricated “gaps” in Matsushima. Ground 2 (obvious over Yu in view of Miyazaki) is not

challenged by Patent Owner, underscoring the strength of the Petition.

As an initial matter, in the section of the PO Brief titled “The Petition Relies Extensively on Expert testimony,” Patent Owner advances ten pages of arguments alleging that Ground 1 uses Mr. Guidash’s declaration to fill so-called “gaps” in the prior art. PO Brief, 14-23. Patent Owner’s arguments are precisely the type of merits briefing in a discretionary denial brief identified as inappropriate in the PTAB’s guidance on the Interim Process: “The parties should *not* treat a discretionary denial brief or opposition as an additional opportunity for merits briefing.” Ex.1066, 7.

Substantively, Patent Owner’s assertion of “gaps” in the Petition’s Ground 1 relies on a flawed, three-step chain of arguments. This chain collapses as soon as any single step fails. Indeed, as detailed below at Sections III.B.3.a-c, each of the three steps in the chain is fundamentally flawed, underscoring the glaring weakness of Patent Owner’s assertion.

- First step: Patent Owner posits a construction of limitation [1.3] that imports an erroneous requirement for “independent control of the integration time of each sensor” that it then alleges Petitioner ignores. Patent Owner alleges that its requirement is based on the Board’s prior institution decision in IPR2022-00710 (the “Toyota IPR”). PO Brief, 15-16. However, the Board’s prior institution decision (i) does not construe

limitation [1.3], and (ii) does not consider or even use the phrase

“independent control.” *See* IPR2022-00710, Paper 13, at 12-13. Petitioner cannot be found to have ignored a construction that has never been considered, much less adopted by the Board. Regardless, the present IPR grounds demonstrate that Matsushima (in Ground 1) and Yu (in Ground 2) disclose *a processing component configured to control an integration time of each sensor*, as claimed.

- Second step: Patent Owner alleges, contrary to the record, “gaps” between the Petition’s Ground 1 (obvious over Matsushima) and its erroneously imported “independent control” requirement. PO Brief, 16-19. There is no such requirement, but even if there were, the *processing component* (in Matsushima) is *configured to control an integration time of each sensor* by providing **distinct** control paths for **independent** imaging systems to control the integration time of an individual sensor **distinct** from another sensor. Thus, Patent Owner’s “gaps” are fabricated.
- Third step: Finally, Patent Owner alleges, again contrary to the record, that Ground 1 improperly relies on expert declaration for filling the so-called “gaps” (PO Brief, 16-23) that Patent Owner has itself fabricated through the above first and second steps. But explaining why a POSITA would understand that the *processing component* of Matsushima that is

configured to control an integration time of each sensor provides distinct

control of integration times for the respective sensors is the proper role of a technical expert.

At bottom, there is no independent control requirement in limitation [1.3] and thus no “gaps” and no impropriety in filling non-existent “gaps.” Moreover, even if Patent Owner were to persuade the merits panel that limitation [1.3] should be construed to require “independent control,” there are no “gaps” because the Petition demonstrates in Ground 1 that Matsushima discloses a processing component configured to control an integration time of each sensor. And in Ground 2, which is uncontested, the Petition also demonstrates that Yu teaches a processing component configured to control an integration time of each sensor that explicitly does so independently for each sensor.

Patent Owner's arguments would require the Director to (i) construe a claim term based on a prior institution decision that did not, in fact, construe that claim term, (ii) evaluate so-called “gaps” in the prior art; and (iii) evaluate the credibility of Petitioner's expert (*see* PO Brief, 14-23)—all before evaluating the strength of the Petition's grounds and extensive evidentiary record. Such merits briefing by Patent Owner is not bifurcation and is inappropriate for a discretionary denial brief because it creates redundant work for the Director and merits panel. Ex.1066, 7.

Regardless, for the sake of completeness, Petitioner presents

counterarguments below.

- a. **The first step of Patent Owner's arguments fails, because the Board's prior institution decision does not construe limitation [1.3] and does not even mention "independent control."**

Citing the previous Board's decision in Toyota IPR, Patent Owner argues that "Petitioner was *on notice* from the Board's prior decision that the independent claims of the '158 Patent required independent control of integration for each sensor." PO Brief, 15-16 (citing IPR2022-00710, Paper 13, at 12-13). However, the Board's previous decision did not construe limitation [1.3], and did not create the "independent control" requirement alleged by Patent Owner. *See generally* IPR2022-00710, Paper 13. The first step of Patent Owner's arguments thus fails.

In particular, the Board construed the term "*wherein each optics component of the plurality of optics components is configured to pass light to a sensor of the plurality of sensors*" (limitation [1.2]) to (i) mean that "*each* of the plurality of optics components is configured to pass light *separately* to a distinct sensor of the plurality of sensors;" and (ii) exclude from the scope of the claims "devices that rely on a *common* optics component to pass light to multiple camera channels." IPR2022-00710, Paper 13, at 11-16. Both of the Petition's Grounds 1 and 2 teach this required one-to-one configuration of limitation [1.2]. *See* Petition, 15-16 (Ground 1 analysis explaining Matsushima having the required one-to-one configuration), 49 (Ground 2 analysis explaining Yu having the required one-to-

one configuration). In fact, Patent Owner *does not dispute the analysis of limitation [1.2] in any of Grounds 1 and 2* of the Petition, underscoring the strength of the Petition.

Following the finding of the one-to-one configuration between an optics component and a sensor in the Toyota IPR, regarding limitation [1.3] at issue here, the Board continues:

Consistent with this interpretation [of the one-to-one configuration between an optics component and a sensor], claim 1 also recites “*a processing component configured to control an integration time of each sensor [limitation [1.3]]*,” which similarly distinguishes the processing component’s configuration as *being able to control the integration time of an individual sensor distinct from the other sensor(s)* in the group.

IPR2022-00710, Paper 13, at 12-13 (emphasis added). As such, the Board’s prior institution decision provides that, consistent with the one-to-one configuration of limitation [1.2], limitation [1.3] has a configuration “*being able to control the integration time of an individual sensor distinct from the other sensor(s)*.” *Id.* The Petition’s analysis in Grounds 1 and 2 (e.g., limitations [1.2] and [1.3]) is consistent with the Board’s interpretation of limitation [1.3] that the processing component’s configuration is “*able to control the integration time of an individual sensor distinct from other sensor(s)*,” which is not disputed by Patent Owner.

Accordingly, the first step of the PO's arguments fails, because the Board's prior institution decision does not provide the construction alleged by Patent Owner.

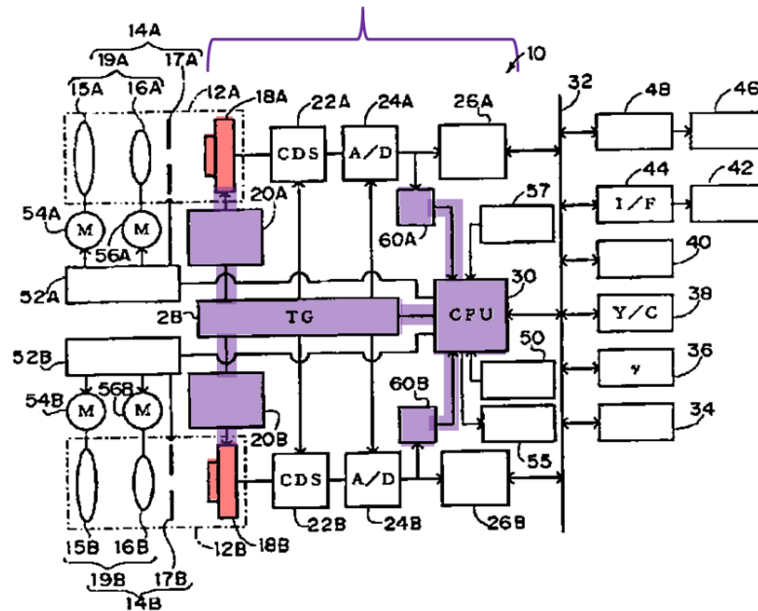
Furthermore, Patent Owner appears to be arguing that the Petition does not acknowledge the Board's prior institution decision or that the Petition's analysis is somehow inconsistent with the Board's prior institution decision. PO Brief, 15-16. That is incorrect. In fact, Patent Owner does not dispute that the Petition's analysis of each of Grounds 1 and 2 (e.g., limitations [1.2] and [1.3]) is consistent with (i) the Board's explicit construction for claim limitation [1.2]; and (ii) its interpretation of limitation [1.3] that the processing component's configuration is "able to control the integration time of an individual sensor distinct from other sensor(s)" as stated in the Board's analysis. *See* Petition, 18-19 (Ground 1, with annotated FIG. 1 of Matsushima, illustrating that Matsushima's CPU has a distinct path to control the integration time of an individual sensor distinct from another sensor); 52-53 (Ground 2, with annotated FIG. 3 of Yu, illustrating that Yu's system provides a distinct path to control the integration time of an individual sensor distinct from another sensor).

- b. The second step of Patent Owner's arguments fails because (i) the alleged "gaps" in Ground 1 are entirely of Patent Owner's own creation, and (ii) Patent Owner fails to address the disclosure from Matsushima identified in the Petition.**

Patent Owner argues that Matsushima fails to teach the alleged independent control requirement for the limitation [1.3] reciting “*a processing component configured to control an integration time of each sensor*” because Matsushima does not disclose its alleged “independent control” requirement. PO Brief, 17-19. This argument fails because Patent Owner fails to address the entirety of the disclosure from Matsushima identified in the Petition for limitation [1.3]. Patent Owner's analysis of Matsushima focuses exclusively on paragraphs [0034]-[0035] and [0048]-[0049] but ignores the disclosure in FIG. 1 and paragraphs [0024], [0027] of Matsushima cited in the Petition for limitation [1.3]. *See* PO Brief, 16-23 (no citations to FIG. 1 and paragraphs [0024], [0027] of Matsushima); *compare with*, Petition, 18-21 (analysis for limitation [1.3] citing Ex.1007 (Matsushima), FIG. 1, [0024], [0027]). The Petition shows that “the CPU 30 ***controls charge accumulation time (i.e., integration time) with an electronic shutter on each sensor.***” Petition, 18-20 (emphasis added) (citing Ex.1007 (Matsushima), [0024] (“CCD 18A and CCD 18B ***each*** have a shutter drain via a shutter gate, and the accumulated signal charges can be swept to the shutter drain by driving the shutter gates with shutter gate pulses.”); [0027] (“A timing signal generating circuit (TG) 28 ***provides appropriate timing signals to the CCD drive circuits 20A and 20B.***”); FIG. 1, reproduced below (illustrating ***independent*** imaging systems 12A and 12B and ***distinct*** control paths for controlling the integration time of an

individual sensor *distinct* from other sensor)).

*a processing component configured to
control an integration time of each sensor*
[FIG. 1]



Ex.1007, FIG. 1, annotated; Ex.1003, ¶94.

Accordingly, the second step in Patent Owner's three-step chain arguments fails for each of the following reasons: (i) it depends on the failed first step, and (ii) Patent Owner's analysis fails to address the full prior art disclosure relied upon by the Petition for this claim limitation.

c. The third step of Patent Owner's arguments fails because Petition's expert's testimony is proper and a strength of the Petition.

In its third step, Patent Owner argues Petition's reliance on expert declaration. PO Brief, 19-23. As discussed above at Sections III.B.1 and III.B.2, the Petition's reliance on expert declaration is proper. Patent Owner's attempt to

separate the prior art's teachings from the expert's explanation contradicts established patent law and should be rejected.

Furthermore, Mr. Guidash's testimony here is a strength of the Petition because it (i) provides helpful context regarding how a POSITA would have understood the technical descriptions of Matsushima and the '158 patent; and (ii) explains terms of art. *See, e.g.*, Ex.1003, ¶¶ 91-93 (Mr. Guidash explaining the term of art "integration time" in the claim and as described in the '158 patent); ¶ 99 (Mr. Guidash providing helpful context by explaining that it was well known to perform distinct control of integration time of respective image sensors "using the respective CCD driver and/or timing generator," as illustrated by contemporaneous documents including many from Fujifilm (the assignee of Matsushima)).

Accordingly, Mr. Guidash's testimony is not only proper, but also a strength of the Petition.

d. The Petition is strong regardless of Patent Owner's Ground 1 argument.

Patent Owner's flawed three-step arguments are directed only to Ground 1. Patent Owner does not contest how the challenged claims are unpatentable under Ground 2 (obvious over Yu in view of Miyazaki). Specifically, Patent Owner does not (and cannot) assert that the prior art in Ground 2 lacks a teaching of the alleged "independent control" requirement. *See* PO Brief, 14-23. The Petition is strong because Ground 2 independently establishes that claims 1-2, 4-5, 8-11, and 13-14

are obvious—even under Patent Owner’s unsupported requirement of independent control. *See, e.g.*, Petition 46 (citing Ex.1005 (Yu), 9:66-10:1 (describing that “each of the image sensors *is respectively and independently controlled* to expose to the same imaging target”)), 52 (FIG. 3 of Yu illustrating that each of the image sensors is independently controlled).

C. The lack of settled expectations favors institution.

Patent Owner points out that the ’158 patent “has been in force since 2016 and is set to expire within the year,” but does not explain how or why this fact, standing alone, favors denial. PO Brief, 14. Patent Owner, for example, does not allege that this length of time has created “settled expectations” as to any aspect of the ’158 patent. Nor could Patent Owner reasonably make such allegations—it only recently acquired the ’158 patent three and a half years ago. Ex.1064 (’158 Patent Assignment Record), 1 (assignment showing transfer to Patent Owner in Oct 2021). Instead, Patent Owner appears to have acquired the ’158 patent solely for the purpose of monetizing it through litigation, significantly decreasing any potential relevance of this factor.

With respect to expectations of validity, no tribunal has ever finally adjudicated the validity of the ’158 patent after it issued. Two previous IPRs (IPR2022-00710 (“Toyota IPR,” settled after institution denial) and IPR2022-01338 (“Honda IPR,” settled prior to institution)) involved the ’158 patent. In the

Toyota IPR, the Board construed the term “*wherein each optics component of the plurality of optics components is configured to pass light to a sensor of the plurality of sensors*” (limitation [1.2]) to (i) mean that “***each*** of the plurality of optics components is configured to pass light ***separately*** to a distinct sensor of the plurality of sensors;” and (ii) exclude from the scope of the claims “devices that rely on a ***common*** optics component to pass light to multiple camera channels.” IPR2022-00710, Paper 13, at 11-16. In the Toyota IPR, the Board denied institution after finding that the one-to-one configuration required in limitation [1.2] was missing from Toyota’s cited prior art. *Id* at 25. None of the prior art cited in Toyota’s IPR petition is relied on in this Petition. More importantly, Grounds 1 and 2 in this Petition are based on prior art that discloses the specific one-to-one configuration that the Board found missing from Toyota’s petition, as explained above at Section III.B.3.a. Patent Owner does not dispute the analysis of limitation [1.2] in this Petition.

Accordingly, Patent Owner’s failure to allege any settled expectations and the lack of any reasonable basis for such expectations favors institution.⁴

⁴ Petitioner notes that Patent Owner did not request discretionary denial on the basis of 35 U.S.C. § 325(d) in the PO Brief, and thus Petitioner does not address that issue. *See* Ex.1066 (FAQs for Interim Processes), 6 (“If a patent owner wishes

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

to raise any applicable bases for discretionary denial, it must do so in a discretionary denial brief.").

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*

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.

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 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

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.

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: May 27, 2025

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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 9,093.

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.

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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 May 27, 2025

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