

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

SAMSUNG ELECTRONICS CO., LTD., SAMSUNG ELECTRONICS
AMERICA, INC., SAMSUNG SEMICONDUCTOR, INC., and SAMSUNG
AUSTIN SEMICONDUCTOR LLC,
Petitioners,

v.

W&WSENS DEVICES INC.,
Patent Owner.

Case IPR2025-00996
U.S. Patent No. 10,446,700

PATENT OWNER'S REQUEST FOR DISCRETIONARY DENIAL

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PATENT OWNER'S EXHIBIT LIST

Exhibit	Description
2001	Messages between W&Wsens and Samsung (April 25, 2019 through April 26, 2019)
2002	Messages between W&Wsens and Samsung (April 27-28, 2019, August 14, 2019, February 20, 2020)
2003	Messages between W&Wsens and Samsung (April 27, 2019, August 14-15, 2019, February 20, 2020)
2004	Messages between W&Wsens and Samsung (April 24-25, 2019, May 14, 2019, August 14, 2019, March 3, 2020)
2005	W&Wsens Devices Inc. presentation – Thin Silicon Photosensors for The Next Generation
2006	Excerpts from the file history of U.S. Patent No. 10,348,240
2007	Excerpts from the file history of U.S Patent No. 10,587,095
2008	Excerpts from Plaintiff W&Wsens Devices Inc.'s First Supplemental Objections and Responses to Defendants' First Set of Interrogatories (Nos. 1 and 3), <i>W&Wsens Devices, Inc. v. Samsung Elecs. Co.</i> , No. 24-cv-00854-JRG, E.D. Tex., served April 3, 2025
2009	Excerpts from Plaintiff W&Wsens Devices Inc.'s Objections and Responses to Defendants' First Set of Interrogatories (Nos. 1- 3), <i>W&Wsens Devices, Inc. v. Samsung Elecs. Co.</i> , No. 24-cv-00854-JRG, E.D. Tex., served March 20, 2025
2010	Photon-trapping microstructures enable high-speed high-efficiency silicon photodiodes, <i>Nature Photonics</i> 11, 301-308 (2017)
2011	Complaint for Patent Infringement, <i>W&Wsens Devices, Inc. v. Samsung Elecs. Co.</i> , No. 24-cv-00854-JRG, Dkt. No. 1 (E.D. Tex. Oct. 21, 2024)

Patent Owner's Request for Discretionary Denial
IPR2025-00996 (U.S. Patent No. 10,446,700)

Exhibit	Description
2012	Second Amended Docket Control Order, <i>W&Wsens Devices, Inc. v. Samsung Elecs. Co.</i> , No. 24-cv-00854-JRG, Dkt. No. 56 (E.D. Tex. April 24, 2025)
2013	Order, <i>Resonant Sys., Inc. v. Sony Grp. Corp.</i> , No. 2:22-cv-00424-JRG, Dkt. No. 84 (E.D. Tex. July 9, 2024)
2014	Order, <i>Gen. Access Sols., Ltd. v. Cellco P'ship</i> , No. 2:22-cv-00394-JRG, Dkt. No. 225 (E.D. Tex. May 22, 2024)
2015	Order, <i>Cal. Inst. of Tech. v. Samsung Elecs. Co.</i> , No. 21-cv-00446-JRG, Dkt. No. 108 (E.D. Tex. Jan. 20, 2023)
2016	Excerpt from U.S. District Court – National Judicial Caseload Profile Federal for the Eastern District of Texas, available at https://www.uscourts.gov/sites/default/files/202412/fcms_na_distprofile0930.2024.pdf
2017	Excerpts from Defendants' Invalidity Contentions cover pleading, <i>W&Wsens Devices, Inc. v. Samsung Elecs. Co.</i> , No. 24-cv-00854-JRG, E.D. Tex., served May 2, 2025
2018	U.S. Patent No. 10,622,498
2019	U.S. Patent No. 9,530,905
2020	W&Wsens Devices Inc. presentation – Time-of-Flight Solutions For The Next Generation

Patent Owner, W&Wsens Devices Inc. (“W&Wsens”), respectfully requests that the Acting Director exercise her discretion to deny this Petition challenging claims 1-4, 7, 9-12, 16-17, 20-21, 24-26, 28-30, 32, and 35 (“the Challenged Claims”) of U.S. Patent No. 10,446,700 (Ex. 1001, “the ’700 Patent”). This request for discretionary denial of institution is authorized by the March 26, 2025, Memorandum regarding “Interim Processes for PTAB Workload Management” from the Acting Director of the United States Patent and Trademark Office. W&Wsens will discuss, in full, the reasons why the ’700 Patent is patentable on the merits in its Patent Owner Preliminary Response, due September 24, 2025.

I. INTRODUCTION

W&Wsens invented microstructured holes in thin silicon photodetectors, an important improvement in image sensors that dramatically improved their sensitivity in low-light situations. After conceiving of these microstructures in April 2013, W&Wsens invested in research and development, simulations, and proof-of-concept test wafer fabrication to validate and refine its microstructure inventions. W&Wsens shared its discoveries with the world in a seminal 2017 article in Nature Photonics that is now widely cited. Starting in 2019, W&Wsens repeatedly disclosed its patents to Petitioners (“Samsung”), explaining the importance of its patented microstructure technology that Samsung is now using. W&Wsens provided detailed

presentations to several of Samsung's officers and offered to partner with or license the patents to Samsung.

Despite these repeated disclosures, Samsung decided to infringe W&Wsens' patents without taking a license. More than six years later and long after W&Wsens commenced an infringement action against Samsung, it has now decided to pursue *inter partes* review of W&Wsens' '700 Patent. The Acting Director should exercise her discretion to deny this Petition for multiple reasons:

- (1) the parties' settled expectations strongly support denial because the '700 Patent has been in force for over six years, Samsung has long been on notice of the '700 Patent, and W&Wsens' invested substantial resources in developing and validating the inventions of the '700 Patent;
- (2) the advanced state of the corresponding litigation between W&Wsens and Samsung in the Eastern District of Texas (the "District Court Action") warrants denial under *Apple Inc. v. Fintiv, Inc.*, because the District Court promises to be the faster and more efficient forum to address the same validity issues raised here, with a trial date set for almost five months before any final written decision would issue from this proceeding; and

- (3) Samsung's reliance on expert testimony to fill in gaps between the art of record and the Challenged Claims weighs in favor of discretionary denial.

II. SAMSUNG'S PROPOSED UNPATENTABILITY GROUNDS

The Petition presents the following grounds for challenging various claims of the '700 Patent.

Ground	Claims	Basis	Reference Relied Upon
1A	1-4, 7, 9-12, 16-17, 20-21, 24-26, 28-30, 32, and 35	§ 102	Kuboi
1B	1-4, 7, 9-12, 16-17, 20-21, 24-26, 28-30, 32, and 35	§ 103	Kuboi

Pet. at 8.

III. ARGUMENT

A. Strong Settled Expectations Favor Discretionary Denial

The parties' strong settled expectations favor discretionary denial of institution, including because (1) the '700 Patent issued around six years ago, (2) Samsung filed IPRs challenging the validity of other, related W&Wsens patents that issued long ago and is also challenging their validity in the District Court Action, (3) Samsung has long had notice of the '700 Patent, and (4) W&Wsens invested substantial resources in the inventions of the '700 Patent. The Director's

Memorandum states that the “[s]ettled expectations of the parties, such as the length of time the claims have been in force,” is a relevant factor when determining whether to deny institution. See USPTO Memorandum – Interim Processes for PTAB Workload Management (Mar. 26, 2025) (“USPTO Memorandum Mar. 26, 2025”) at 2. “Although there is no bright-line rule on when expectations become settled, in general, the longer the patent has been in force, the more settled expectations should be.” *Dabico Airport Sols. Inc. v. AXA Power ApS*, No. IPR2025-00408, Paper 21 at 3 (P.T.A.B. June 18, 2025).

First, the '700 Patent issued on October 15, 2019, and has, therefore, been in force for almost six years, giving rise to strong settled expectations. See *Amgen Inc. v. Bristol-Myers Squibb Co.*, No. IPR2025-00601, Paper 9 at 3 (P.T.A.B. July 24, 2025) (finding that a challenged patent that has been in force for six years creates strong settled expectations); *Kahoot! AS v. Interstellar Inc.*, No. IPR2025-00696, Paper 12 at 2 (P.T.A.B. July 31, 2025) (finding that a challenged patent that has been in force for over six years creates strong settled expectations).

Second, the strong settled expectations with respect to W&Wsens' related patents further supports denial. Samsung filed petitions for IPR against multiple other W&Wsens patents, including IPR2025-00997, challenging U.S. Patent No. 9,525,084, which issued close to nine years ago (on December 20, 2016) and IPR2025-00995, challenging U.S. Patent No. 10,468,543, which issued almost six

years ago (on November 5, 2019). In circumstances where “the district court will be considering the validity of the patents challenged in [IPRs against older patents], along with the validity of the patents challenged in [IPRs against newer patents], . . . referring [the newer patent IPRs] to the Board would be an inefficient use of Board resources and tips the balance to discretionary denial as to those patent too.” *Samsung Elecs. Co. v. iCashe, Inc.*, No. IPR2025-00639, Paper 11 at 2-3 (P.T.A.B. Aug. 14, 2025) (declining to institute IPRs against patents that had issued approximately two years ago in view of decision to deny institution against related patents that had issued eight to twelve years ago).

Third, Samsung's awareness of the '700 Patent further creates settled expectations. W&Wsens disclosed the '700 Patent to Samsung on April 25, 2019, when it sent information about its patent portfolio and technology. Exs. 2001-2004, Ex. 2001 at 1-6; *Google LLC v. Soundclear Techs., LLC*, No. IPR2025-00344, Paper 15 at 2-3 (P.T.A.B. Aug. 4, 2025) (petitioner's prolonged knowledge of the challenged patents creates strong settled expectations); *Murata Mfg. Co. v. Ga. Tech. Rsch. Corp.*, No. IPR2025-00383, Paper 14 at 2-3 (P.T.A.B. July 29, 2025) (finding strong settled expectations because petitioner was aware of patent owner's technology space “for a significant amount of time before filing its Petition challenging Patent Owner's patent”).

W&Wsens first communicated with four executives at Samsung on April 24, 2019, and continued to do so for over a year. Ex. 2004; *see also* Exs. 2001-2004. On April 25, 2019, W&Wsens messaged a Samsung executive a comprehensive presentation entitled “Time of Flight Solutions for the Next Generation.” Ex. 2001 at 5-6; Ex. 2020 (April 24, 2019 Presentation). This presentation specifically referenced the publication for the '700 Patent (US 2018/0102442 A1) and included a wealth of information about W&Wsens' patent portfolio, the marketing outlook for W&Wsens' patents, and technical charts and graphs about W&Wsens' technology. Ex. 2020 at 4, 5-7, 11-15.

W&Wsens sent Samsung an additional presentation on February 20, 2020, that also specifically referenced the '700 Patent. This presentation was entitled “Thin Silicon Photosensors For the Next Generation.” and contained information about W&Wsens' patent portfolio, the marketing outlook for W&Wsens' patents, and scientific reports about W&Wsens' technology. Exs. 2002-2004; Ex. 2005 at 4-5, 6, 8, 11 (February 20, 2020 Presentation).

W&Wsens then offered Samsung the possibility of partnering, licensing, or investing in W&Wsens on multiple occasions, including on March 24, 2020. Ex. 2004 at 14-16. W&Wsens' offer and comprehensive presentations put Samsung on actual notice of the '700 Patent. Nevertheless, Samsung waited more than five years before challenging the validity of the '700 Patent.

Samsung was also put on notice of W&Wsens' patents and applications related to the '700 Patent by no later than November 16, 2018, more than seven years before Samsung filed this Petition, when those applications were cited as prior art to pending applications filed by Samsung. *See Dabico Airport Sols. Inc.*, Paper 21 at 3 (noting that actual notice of a particular challenged patent is unnecessary to create settled expectations because published applications are searchable). Once Samsung was put on notice of W&Wsens' technology, it had every reason to avail itself of "the Office's automated search systems as well as publicly available resources on the Internet" to understand the scope of W&Wsens' IP rights. *Id.*

The USPTO identified one of the applications in the '700 Patent's priority chain as prior art to one of Samsung's pending applications in a Notice of References Cited on November 16, 2018. Ex. 2006 at 9 (citing US-20160254407-A1), Ex. 2018 ('498 Patent, Application Number 14/947,718). On July 11, 2019, the USPTO identified another application in the '700 Patent's priority chain as prior art to one of Samsung's pending applications in an Office Action. Ex. 2007 at 9-10, 12 (citing US-20160307939-A1), Ex. 2019 ('905 Patent, Application Number 14/943,898). Both patent applications cited by the UPSTO to Samsung share common subject matter with the '700 Patent. Therefore, Samsung has had at least constructive notice of the '700 Patent for at least seven years, which further supports strong settled expectations. *See iRhythm Techs., Inc. v. Welch Allyn, Inc.*, No. IPR2025-00363,

Paper 10 at 3 (P.T.A.B. June 6, 2025) (finding that settled expectations favored denial of institution because the petitioner was aware of the patent owner's patents during prosecution of its own patents).

Fourth, W&Wsens' "investment, time, and resources dedicated to research, development, [and] trials" that went into developing the claimed invention further gives rise to settled expectations that weigh in favor of discretionary denial. *Amgen Inc.*, Paper 9 at 2 (explaining that the level of investment in the claimed invention can create settled expectations for patents in force for even less than six years).

In April 2013, Inventors Shih-Yuan Wang and Shih-Ping Wang were working on solutions to improve the absorption efficiency of thin silicon photodetectors, such as for use in CMOS sensor and optical interconnect applications. Ex. 2008 (4/3/25 Resp. to Interrogatories) at 14-15. After conceiving of the solution of using microstructures in thin silicon photodetectors, they worked diligently with their patent counsel to prepare a patent application. They filed provisional application U.S. 61/826,446 shortly thereafter on May 22, 2013. *Id.*

W&Wsens invested in bringing in additional team members to participate in developing their technology. In June 2014, they engaged Dr. M. Saif Islam, a professor at the University of California, Davis, to fabricate proof of concept photodetectors to test their inventions and collaborate on design improvements. *Id.* at 15. Dr. Islam conducted a series of proof-of-concept fabrication runs, verifying

the efficacy of the use of microstructures and fabricating and testing the resulting photodetectors. *Id.* Along with Shih-Yuan Wang and Shih-Ping Wang, Dr. Islam contributed to the conception, testing, refinement, and reduction to practice of the '700 Patent's claims. *Id.* In addition, in late 2024, W&Wsens engaged Katya Ponizovskaya Devine, who conducted computer simulations confirming the efficacy of the inventors' inventions. Ex. 2009 (3/20/25 Resp. to Interrogatories) at 14. The group published *Photon-trapping microstructures enable high-speed high-efficiency silicon photodiodes* in *Nature Photonics* 11, 301-308 (2017). Ex. 2010.

Thus, strong settled expectations favor discretionary denial. *iRhythm Techs., Inc.*, Paper 10 at 3 (denying institution in view of the settled expectations of the parties).

B. The Acting Director Should Deny Institution Under *Fintiv*

The Director should deny institution under 35 U.S.C. § 314(a). The *Fintiv* Factors overwhelmingly support denying institution because trial in the District Court Action is scheduled to commence almost five months before a final written decision ("FWD") would be expected in this IPR in the event of institution. *Apple Inc. v. Fintiv, Inc.*, No. IPR2020-00019, Paper 11 (P.T.A.B. Mar. 20, 2020) (precedential) ("*Fintiv*"); *Samsung Elecs. Co. v. Headwater Rsch. LLC*, No. IPR2025-00481, Paper 9 (P.T.A.B. Aug. 4, 2025) (denying institution where time-

to-trial statistics suggest that trial will begin four months before the projected FWD deadline).

W&Wsens asserted the '700 Patent in the District Court Action against Samsung on October 21, 2024, after Samsung rebuffed W&Wsens' attempts to partner with Samsung. Ex. 2011 (Complaint) at ¶¶ 1, 32, 90-104. Trial in the District Court Action is scheduled for August 3, 2026. Ex. 2012 (Docket Control Order). Samsung waited seven months before filing this Petition on May 20, 2025. In the event this IPR is instituted, a FWD would not be expected until late December 2026, almost five months after the scheduled trial date.

1. *Fintiv* Factor 1 Favors Denial Because a Stay Is Unlikely

Fintiv Factor 1 favors discretionary denial in this case because Judge Gilstrap is highly unlikely to stay the District Court Action. Factor 1 favors discretionary denial where “there is insufficient evidence that the district court is likely to stay its proceeding even if the Board were to institute trial.” *Arm Ltd. v. Daedalus Prime LLC*, No. IPR2025-00207, Paper 10 at 2 (P.T.A.B. May 16, 2025) (denying institution in part due to the absence of evidence of a likelihood of a stay), *vacated on other grounds*; *Ericsson Inc. v. Procomm Int’l Pte. Ltd.*, No. IPR2024-01455, Paper 15 at 2 (P.T.A.B. May 16, 2025) (same).

Here, Samsung has not asked Judge Gilstrap to stay the District Court Action. Any such request would be unlikely to succeed because it is the practice of the

Eastern District of Texas to deny pre-institution motions to stay as premature. *See* Ex. 2013, *Resonant Sys., Inc. v. Sony Grp. Corp.*, No. 2:22-cv-00424-JRG, Dkt. No. 84 at 3 (E.D. Tex. July 9, 2024) (“[T]his Court routinely denies pre-institution motions to stay as premature.”). To the extent Samsung files a motion to stay *after* the December 24, 2025, institution decision deadline in this case, such a motion would be unlikely to succeed given the advanced stage of the case.

First, Samsung delayed filing this Petition for seven months after W&Wsens commenced the District Court Action. Judge Gilstrap routinely denies motions to stay filed by petitioners like Samsung who are dilatory in filing IPRs. *See, e.g.*, Ex. 2014, *Gen. Access Sols., Ltd. v. Cellco P’ship*, No. 2:22-cv-00394-JRG, Dkt. No. 225 at 4 (E.D. Tex. May 22, 2024) (defendants’ late filing of IPRs “seven and eight months after Plaintiff filed suit” weighs against a stay).

Second, Judge Gilstrap denies motions to stay where the “parties [have] engaged in extensive discovery” before the briefing on the motion to stay is complete. *See* § III.B, *infra* (Factor 3); Ex. 2015, *Cal. Inst. of Tech. v. Samsung Elecs. Co.*, No. 21-cv-00446-JRG, Dkt. No. 108 at 5 (E.D. Tex. Jan. 20, 2023); Ex. 2014, *Gen. Access Sols.* at 4 (finding that the state of the case disfavors a stay when “the parties have already completed fact discovery and will have served opening expert reports by the time the Motion to Stay is fully briefed”).

By the time an institution decision is expected in this proceeding, the parties to the District Court Action will have already engaged in extensive discovery, including exchanging infringement, invalidity, and subject-matter eligibility contentions, proposed claim terms for construction, and preliminary claim constructions, and will have filed a joint claim construction statement, narrowed the election of asserted claims, substantially completed document production and privilege logs, and begun claim construction briefing. See Ex. 2012 (Docket Control Order) at 5-6. Moreover, the briefing schedule on any motion to stay filed after the institution deadline, would extend beyond the end of claim construction briefing and nearly to the end of fact discovery. *Id.* at 4-5.

Accordingly, *Fintiv* Factor 1 weighs in favor of denying institution because it is unlikely that the District Court will stay the co-pending District Court Action.

2. *Fintiv* Factor 2 Favors Denial Due to the Trial's Proximity to the Written Decision Deadline

Fintiv Factor 2 strongly favors discretionary denial because trial in the District Court Action is scheduled to commence on August 3, 2026, approximately four-and-a-half months before the December 24, 2026, deadline to issue a FWD in this IPR. Ex. 2012 at 1. As a result, engaging in an IPR in parallel to the District Court case would raise a risk “of inconsistent outcomes and duplication of efforts resulting from . . . proceedings operating in parallel.” *Amgen Inc.*, Paper 9 at 2.

The Board and Acting Director have repeatedly found that discretionary denial is appropriate when the FWD is expected one or more months after the projected trial date. *See, e.g., Amazon.com, Inc. v. KAIFI LLC*, No. IPR2025-00624, Paper 16 at 2 (P.T.A.B. July 29, 2025) (finding a one month gap between projected trial date and Board's FWD deadline favored discretionary denial); *BOE Tech. Grp. Co. v. Optronix Scis. LLC*, No. IPR2025-00238, Paper 11 at 2 (P.T.A.B. July 29, 2025) (finding a three month gap between projected trial date and Board's FWD deadline favored discretionary denial); *Samsung Elecs. Co. v. OS-New Horizon Personal Computing Sols. Ltd.*, No. IPR2025-00613, Paper 10 at 2 (P.T.A.B. July 17, 2025) (finding a three and a half month gap between scheduled trial date and Board's FWD deadline favored discretionary denial); *NXP USA, Inc. v. Redstone Logics LLC*, No. IPR2025-00485, Paper 11 at 2 (P.T.A.B. July 10, 2025) (finding a three month gap between scheduled trial date and Board's FWD deadline favored discretionary denial); *Coretronic Corp. v. Maxell, Ltd.*, No. IPR2025-00474, Paper 11 at 2 (P.T.A.B. July 10, 2025) (finding a four month gap between projected trial date and Board's FWD deadline favored discretionary denial).

The median time-to-trial in the Eastern District of Texas is 21.9 months (i.e., approximately August 20, 2026), which "lends credibility to" the scheduled August 3, 2026, trial date. Ex. 2016; *see also Samsung Elecs. Co. v. Secure Wi-Fi LLC*, No. IPR2024-01367, Paper 10 at 12-13 (P.T.A.B. Mar. 24, 2025) (finding that Factor 2

weighed heavily in favor of denial and recognizing Judge Gilstrap's time-to-trial statistics as lending credibility to scheduled trial date, which was set to occur five months before FWD deadline); *see also* March 24, 2025 Guidance on USPTO's recission of Interim Procedure for Discretionary Denials at 3 (“[T]he Board may consider any evidence . . . that bears on the proximity of the district court's trial date . . . including median time-to-trial statistics for civil actions in the district court in which the parallel litigation resides.”).

Therefore, *Fintiv* Factor 2 weighs strongly in favor of the Board exercising its discretion to deny institution.

3. *Fintiv* Factor 3 Favors Denial Because of the Parties' Investment in the Case

Fintiv Factor 3 favors discretionary denial because the parties will already have invested significant resources in the District Court Action by the time the Board's institution decision is due. As discussed above, by that time the parties will have prepared infringement, invalidity, and subject-matter eligibility contentions, proposed claim terms for construction, preliminary claim constructions, a joint claim construction statement, narrowed elections of asserted claims and prior art, document productions, privilege logs, and begun claim construction briefing. *See* Ex. 2012 (Docket Control Order) at 5-6.

This level of investment in the parallel District Court Action, combined with Samsung's unexplained delay in filing the Petition, tips Factor 3 in favor of denial. *Fintiv*, Paper 11 at 11-12, n.22 (weighing the petitioner's unexplained delay in filing the petition in favor of denial of the petition and noting that had the petitioner filed the petition around the same time as the service of its initial invalidity contentions, the PTAB proceeding may have resolved the issues prior to the district court) (citing *Next Caller, Inc. v. TRUSTID, Inc.*, No. IPR2019-00961, Paper 10 at 16 (P.T.A.B. Oct. 16, 2019)).

4. *Fintiv* Factor 4 Favors Denial Despite Samsung's Stipulation Because it Fails to Provide a True Alternative to District Court Litigation

Fintiv Factor 4 favors denial because Samsung challenges "the same or substantially the same claims, grounds, arguments, and evidence" as are at issue in the parallel District Court Action. *Fintiv*, Paper 11 at 12-13. Here, Samsung is disputing all of the same claims challenged in the District Court Action. *See Ex. 2017 at 1.*

Samsung's Petition asserts "the same or substantially the same . . . grounds, arguments, and evidence" as it asserts in the District Court Action because there is substantial overlap between the reference and arguments Samsung elected to assert in both forums. *Fintiv*, Paper 11 at 12-13. As shown in the chart below, Samsung's invalidity contentions assert *Kuboi* (Ex. 1004), the same reference at issue in its

Petition. In particular, seven of Samsung's eight invalidity grounds for the '700 Patent in the District Court Action include *Kuboi* as a reference.

**Table 7: Exemplary Anticipatory and Combinations
for the Asserted Claims of the '700 Patent**

Chart	Prior Art References
D1	<i>Kuboi</i> either alone or in combination with the knowledge of a person of ordinary skill in the art.
D2	NXP either alone or in combination with one or more of <i>Kuboi</i> and Obara.
D3	Wang189 either alone or in combination with one or more of <i>Kuboi</i> , NXP, and Obara.
D4	Obara either alone or in combination with one or more of <i>Kuboi</i> and NXP.
D5	Canon Product either alone or in combination with one or more of DARPA Imaging Sensor, Solar Cells, and <i>Kuboi</i> .
D6	Sony CMOS Product either alone or in combination with one or more of DARPA Imaging Sensor, Solar Cells, NXP, Obara, and <i>Kuboi</i> .
D7	Omnivision CMOS Product either alone or in combination with one or more of DARPA Imaging Sensor, Solar Cells, and <i>Kuboi</i> .
D8	Samsung Product under Plaintiff's apparent interpretation of the asserted claims

Ex. 2017 at 60 (highlighting added).

Although Samsung has offered a stipulation to purportedly mitigate some of the concerns of duplicative efforts and inconstant decisions, that stipulation does not represent a true alternative to the validity portion of the District Court Action. See Paper 9. In its stipulation, Samsung expressly reserved the right to assert in the District Court any combination of prior art based on printed publications that could have been raised in the Petition, so long as the combination also includes evidence

(such as a prior art product) that could not have been raised in the Petition. *Id.* Accordingly, Samsung's grounds D5-D8 in the table above, which rely on alleged prior art products and are half of the invalidity grounds at issue in the District Court Action, are unaffected by Samsung's stipulation other than that they cannot rely on *Kuboi*, which Samsung cited in this Petition. Thus, Samsung's stipulation will not meaningfully narrow the validity issues in the District Court Action.

Indeed, Samsung's stipulation permits it to assert grounds primarily based on any patents and printed publications other than those cited in the Petition in combination with conventional prior art photodetectors, like the Canon Product or Sony CMOS Product. Samsung has raised 253 patents and published publications, 139 non-patent publications, and 11 products in its invalidity contentions (Ex. 2017 at 12-29, 30-46, 47-48), and it only promises not to rely on the selected few publications cited in the Petition. See Paper 9. And because Samsung will have another opportunity to amend its invalidity contentions following the District Court's claim construction order, Samsung can attempt to keep those references in play in the District Court Action. If Samsung intended to avoid this result, it could have provided a more fulsome stipulation, rather than hedging its bets.

Accordingly, Samsung's stipulation seeks to exploit the loophole recognized by the Federal Circuit, without meaningfully narrowing its invalidity grounds in the District Court action. See *Ingenico Inc. v. IOENGINE, LLC*, No. 2023-1367, 136

F.4th 1354, 1367 (Fed. Cir. May 7, 2025) (recognizing that IPR estoppel does not preclude a petitioner from relying on a prior art system “with related printed publications at trial to prove the claimed invention was known or used by others, on sale, or in public use”). Therefore, Factor 4 weighs in favor of denial.

5. *Fintiv* Factor 5 Favors Denial Because the Parties Are the Same

Fintiv Factor 5 weighs in favor of exercising discretionary denial because the parties in this proceeding and in the District Court action are the same. *Fintiv*, Paper 11 at 13-14 (when the parties to the parallel district court action are identical, that weighs in favor of discretionary denial).

6. *Fintiv* Factor 6 Favors Denial on the Merits of the Unpatentability Case

Fintiv Factor 6 weighs in favor of denying institution because the merits of Samsung's case are weak. As discussed directly below, *Kuboi* facially fails to disclose multiple limitations of the Challenged Claims. See § III.C, *infra*. Tacitly acknowledging the shortcomings in *Kuboi*'s disclosures, Samsung relies extensively on the conclusory testimony of its expert, Dr. Lebby, to try to fill in these gaps. The facial weakness of Samsung's case is another factor in favor of discretionary denial. *Fintiv*, Paper 11 at 15 (“[I]f the merits of the grounds raised in the petition are a closer call, then that fact has favored denying institution when other factors favoring denial are present.”).

C. The Acting Director Should Deny Institution Because of Samsung's Dependence on Expert Testimony to Fill in Missing Claim Limitations

An additional reason to deny institution is because Samsung's Petition depends on expert testimony to fill in missing claim limitations. See *USPTO Memorandum* (Mar. 26, 2025) at 2 (discretionary denial may be warranted based on the "extent of the petition's reliance on expert testimony"); see also Interim Director Discretionary Process¹ (extensive reliance on expert testimony and/or reasonable disputes between experts on dispositive issues may suggest that the questions are better resolved in an Article III court).

Samsung's Petition depends on the testimony of Dr. Lebby to support every limitation in the Challenged Claims. *Kuboi*, the only reference at issue, consists of only seventeen pages of text and fifteen sheets of drawing. Dr. Lebby's declaration spans **155 pages** and Samsung heavily relies on it throughout its Petition to attempt to paper over the many deficiencies in *Kuboi*'s scant disclosure. A viable invalidity ground should not require so much dressing up and gloss on the reference itself. Should this IPR proceed, W&Wsens' expert will explain the many errors in Dr. Lebby's analysis of *Kuboi*.

¹ <https://www.uspto.gov/patents/ptab/interim-director-discretionary-process>
(updated Aug. 22, 2025).

This battle of the experts is better resolved in the District Court Action in the context of a fulsome evidentiary proceeding where the adjudicator can rely on live testimony and cross examination from the experts to assess credibility, rather than an abbreviated administrative proceeding, where testimony will only be received in excerpted form on the papers. As the Board has recognized, extensive reliance on expert testimony and/or reasonable disputes between experts on dispositive issues may suggest that the questions are better resolved in an Article III court. See Interim Director Discretionary Process (updated Aug. 22, 2025). This is another reason the Acting Director should exercise her discretion to deny institution.

IV. CONCLUSION

For all of these reasons, W&Wsens accordingly requests that the Board deny institution of *inter partes* review of the Challenged Claims of the '700 Patent.

Patent Owner's Request for Discretionary Denial
IPR2025-00996 (U.S. Patent No. 10,446,700)

Respectfully submitted,

Date: August 25, 2025

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CERTIFICATE OF COMPLIANCE WITH 37 C.F.R. § 42.24

The undersigned hereby certifies that the portions of the foregoing **PATENT OWNER'S REQUEST FOR DISCRETIONARY DENIAL** has 4,261 words in compliance with the 14,000 word limit set forth in 37 C.F.R. § 42.24 and the Acting Director's March 26, 2026 "Interim Processes for PTAB Workload Management" Memorandum. This word count was prepared using the Microsoft Word word-processing system used to prepare this paper.

Dated: August 25, 2025

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CERTIFICATE OF SERVICE

The undersigned certifies, in accordance with 37 C.F.R. § 42.6(e), and pursuant to agreement by the parties that filing with the Board through the Patent Trial and Appeal Case Tracking System (P-TACTS) constitutes electronic service, that service was made on Petitioner as detailed below.

<i>Date of service</i>	August 25, 2025
<i>Manner of service</i>	Electronic Filing with the Board (joshua.goldberg@finnegan.com; benjamin.saidman@finnegan.com; abhay.watwe@finnegan.com; biju.chandran@finnegan.com; kai.rajan@finnegan.com)
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