

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,

Petitioner,

v.

W&WSENS DEVICES INC.,

Patent Owner.

Case PGR2025-00082
Patent No. 12,243,948

PETITIONER'S OBJECTIONS TO EXHIBITS

Pursuant to 37 C.F.R. § 42.64(b)(1), Petitioner submits the following objections to Patent Owner's Exhibits 2001–2005, 2010, 2020, 2023, 2024, and 2030–2033. These objections apply equally to Patent Owner's reliance on the identified exhibits in any subsequently filed paper in this proceeding.

Exhibits 2001-2004

Petitioner objects to Exhibits 2001–2004 pursuant to 37 C.F.R. § 42.62. These exhibits consist of purported communications between Patent Owner and the plaintiff dated between April 2019 and March 2020. The communications are irrelevant to any issue presented in this Post-Grant Review and have no tendency to make any fact of consequence regarding the patentability of the challenged claims more or less probable. They are therefore inadmissible under FRE 401 and 402. Even if marginally relevant, any probative value is substantially outweighed by the risk of unfair prejudice, confusion of the issues, and waste of time under FRE 403, as the messages do not address claim scope, written description, enablement, or any other statutory ground raised in the Petition. To the extent offered for the truth of the matters asserted, the exhibits also constitute inadmissible hearsay under FRE 801 and 802. Petitioner requests that the Board exclude Exhibits 2001–2004 or accord them no weight.

Exhibit 2005

Petitioner objects to Exhibit 2005 pursuant to 37 C.F.R. § 42.62. Exhibit 2005 appears to be an unauthenticated 14-page presentation by Patent Owner that does not identify an author, a publication date, or whether and where it was published. Although the first page references “Thin Silicon Photosensors For The Next Generation,” Patent Owner has not authenticated the exhibit under FRE 901 or established that it was publicly accessible prior to the alleged invention date. The exhibit constitutes inadmissible hearsay under FRE 801(c) and 802, with no applicable exception shown. Further, the exhibit is irrelevant to a POSITA’s understanding at the relevant time under FRE 401 and 402, and any probative value is substantially outweighed by the risk of misleading the Board under FRE 403. Petitioner requests that the Board exclude Exhibit 2005 or accord it no weight.

Exhibit 2010

Petitioner objects to Exhibit 2010 pursuant to 37 C.F.R. § 42.62. Exhibit 2010 appears to be an article titled “Photon-Trapping Microstructures Enable High-Speed High Efficiency Silicon Photodiodes,” published online in Nature Photonics on April 3, 2017—approximately four years after the earliest claimed priority date of May 22, 2013 of the ’948 Patent. Ex. 1001, cover page (item 60). Because the exhibit post-dates the relevant time period and evidences technical understanding from well after the patent’s alleged priority date, it is irrelevant to a

POSITA's understanding at the time of the alleged invention and inadmissible under FRE 401 and 402. Any probative value is also substantially outweighed by the risk of misleading the Board under FRE 403. Petitioner requests that the Board exclude Exhibit 2010 or accord it no weight.

Exhibit 2020

Petitioner objects to Exhibit 2020 pursuant to 37 C.F.R. § 42.62. Exhibit 2020 appears to be a 13-page internet article dated December 20, 2024, titled "Three types of photodiodes and their structures and operating principles," that does not identify an author. Patent Owner has not authenticated the exhibit under FRE 901 or established its reliability. Because the exhibit post-dates the claimed May 22, 2013 priority date of the '948 Patent (Ex. 1001, cover page (item 60)), it is irrelevant to a POSITA's understanding at the time of the alleged invention and inadmissible under FRE 401 and 402. To the extent offered for the truth of the matters asserted, the exhibit constitutes inadmissible hearsay under FRE 801 and 802, and any probative value is substantially outweighed by the risk of misleading the Board under FRE 403. Petitioner requests that the Board exclude Exhibit 2020 or accord it no weight.

Exhibit 2023

Petitioner objects to Exhibit 2023 pursuant to 37 C.F.R. § 42.62. Exhibit 2023 appears to be a 9-page online article titled "Optical Properties of Silicon" that

does not identify an author or a publication date. Patent Owner has not authenticated the exhibit under FRE 901 or established its reliability or public accessibility. The exhibit is therefore irrelevant to any issue presented in this Post-Grant Review and inadmissible under FRE 401 and 402. To the extent offered for the truth of the matters asserted, the exhibit also constitutes inadmissible hearsay under FRE 801 and 802, and any probative value is substantially outweighed by the risk of misleading the Board under FRE 403. Petitioner requests that the Board exclude Exhibit 2023 or accord it no weight.

Exhibit 2024

Petitioner objects to Exhibit 2024 pursuant to 37 C.F.R. § 42.62. Exhibit 2024 appears to be a 25-page article titled “The State of the Art of CMOS Image Sensors,” which states that it was “Originally presented at IISW 2021,” but does not identify where, when, or whether it was subsequently published. Patent Owner has not authenticated the exhibit under FRE 901 or established its public accessibility or reliability. The exhibit is therefore irrelevant to a POSITA’s understanding at the relevant time, evidences technical understanding from well after the patent’s alleged priority date, and is inadmissible under FRE 401 and 402. To the extent offered for the truth of the matters asserted, it also constitutes inadmissible hearsay under FRE 801 and 802, and any probative value is substantially outweighed by the risk of

misleading the Board under FRE 403. Petitioner requests that the Board exclude Exhibit 2024 or accord it no weight.

Exhibit 2030

Petitioner objects to Exhibit 2030 pursuant to 37 C.F.R. § 42.62. Exhibit 2030 purports to be an English-language machine translation of Japanese Patent JP3423279B2 to Hiramoto, but Patent Owner provides no evidence establishing the accuracy or reliability of the translation. There is no declaration from a qualified translator, no identification of the translation method or tool used, and no statement that the English text is a true and accurate translation of the original Japanese document. *See* 37 CFR § 42.63(b). Patent Owner has therefore failed to authenticate the exhibit under FRE 901. To the extent offered for the truth of the matters asserted, the exhibit constitutes inadmissible hearsay under FRE 801 and 802, and any probative value is substantially outweighed by the risk of misleading the Board under FRE 403. Petitioner requests that the Board exclude Exhibit 2030 or accord it no weight.

Exhibit 2031

Petitioner objects to Exhibit 2031 pursuant to 37 C.F.R. § 42.62. Exhibit 2031 appears to be a Wikipedia printout that does not identify an author, the author's qualifications, or the date of publication or revision. Patent Owner has therefore failed to authenticate the exhibit under FRE 901. The exhibit further

constitutes inadmissible hearsay as an anonymous, unsworn, out-of-court statement offered for the truth of the matters asserted, with no applicable exception. FRE 801(c), 802, 803. Patent Owner also provides no evidence that Exhibit 2031 reflects the knowledge or understanding of a person of ordinary skill in the art at the time of the alleged invention, rendering it irrelevant under FRE 401 and 402. In any event, any probative value is substantially outweighed by the risk of misleading the Board under FRE 403. Petitioner requests that the Board exclude Exhibit 2031 or accord it no weight.

Exhibit 2032

Petitioner objects to Exhibit 2032 pursuant to 37 C.F.R. § 42.62. Exhibit 2032 purports to be an online tutorial titled “Understanding the Limits of the Bouguer-Beer-Lambert Law,” dated 2023–2024. Patent Owner has not authenticated the exhibit under FRE 901, as it does not identify the author’s qualifications, or a reliable publication source. Because the exhibit post-dates the relevant time period and evidences technical understanding from well after the patent’s alleged priority date, it is irrelevant to a POSITA’s understanding at the time of the alleged invention and inadmissible under FRE 401 and 402. To the extent offered for the truth of the matters asserted, the exhibit also constitutes inadmissible hearsay under FRE 801 and 802, and any probative value is

substantially outweighed by the risk of misleading the Board under FRE 403.

Petitioner requests that the Board exclude Exhibit 2032 or accord it no weight.

Exhibit 2033

Petitioner objects to Exhibit 2033 pursuant to 37 C.F.R. § 42.62. Exhibit 2033 appears to be a patent publication in the Japanese language, improperly submitted without any English-language translation. *See* 37 CFR § 42.63(b). Patent Owner has failed to authenticate the exhibit under FRE 901 or establish what the document purportedly discloses. To the extent offered for the truth of its contents, the exhibit constitutes inadmissible hearsay under FRE 801 and 802. Because the absence of an English translation prevents meaningful evaluation of relevance or probative value, the exhibit is also inadmissible under FRE 401 and 402, and any probative value is substantially outweighed by the risk of misleading the Board under FRE 403. Petitioner requests that the Board exclude Exhibit 2033 or accord it no weight.

Respectfully submitted,

Dated: February 25, 2026

By: / Joshua Goldberg /
Joshua Goldberg, Reg. No. 59,369

CERTIFICATE OF SERVICE

The undersigned hereby certifies that a copy of the foregoing **Petitioner's Objections to Exhibits** was served on February 25, 2026, via email directed to counsel of record for Patent Owner at the following:

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Dated: February 25, 2026

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