

UNITED STATES PATENT AND TRADEMARK OFFICE

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BEFORE THE PATENT TRIAL AND APPEAL BOARD

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

Petitioner,

v.

W&WSENS DEVICES INC.,

Patent Owner.

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

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**PETITIONER'S OBJECTIONS TO PATENT OWNER'S EXHIBITS FILED  
WITH PATENT OWNER RESPONSE**

Pursuant to 37 C.F.R. § 42.64(b)(1), Petitioner submits the following objections to Patent Owner's Exhibits 2049 and 2051-2054 submitted with Patent Owner's Response (paper 23). These objections apply equally to Patent Owner's reliance on the identified exhibits in any subsequently filed paper in this proceeding.

**Exhibit 2049**

Pursuant to 37 C.F.R. § 42.64(b)(1), Petitioner objects to Exhibit 2049, which is a printout of a webpage titled "Organic Semiconductors" presumably from the Optoelectronics Group of the University of Cambridge. These objections are made to preserve Petitioner's right to seek exclusion of this exhibit.

Exhibit 2049 is not admissible evidence and should be accorded no weight. The exhibit is an undated, unauthenticated printout of an internet webpage that does not identify an author, publication date, or source sufficient to establish its origin or reliability. The only date associated with the exhibit appears to be the date on which it was downloaded or printed, which does not establish when, if ever, the content was publicly available.

First, Exhibit 2049 lacks proper authentication under FRE 901. To satisfy the authentication requirement, the proponent must introduce evidence sufficient to support a finding that the item is what it purports to be. Patent Owner has provided

no testimony or evidence from a person with knowledge of the website, its authorship, or its contents, nor any evidence establishing that the printout accurately reflects the content of the webpage at any relevant time. As recognized in PTAB practice, when offering a printout of a webpage, the proponent must authenticate the website itself, not merely the printed document. Here, there is no such authentication.

Second, Exhibit 2049 is irrelevant under FRE 401 and inadmissible under FRE 402. Without any identified author, publication date, or evidence of dissemination, the exhibit cannot be shown to reflect information available to a person of ordinary skill in the art at any relevant time. Accordingly, it has no tendency to establish the state of the art, the knowledge of a skilled artisan, or any issue of patentability in this proceeding.

Third, even if marginally relevant, any probative value is substantially outweighed by the risk of unfair prejudice, confusion of the issues, and misleading the Board under FRE 403. The exhibit's lack of authorship, provenance, and temporal context creates a substantial risk that the Board would be asked to rely on incomplete or potentially outdated information. Web-based materials are inherently dynamic and subject to change, which further undermines their reliability when presented without proper context or authentication.

Fourth, Exhibit 2049 constitutes inadmissible hearsay under FRE 801 and 802. The webpage contains out-of-court statements offered for the truth of the matters asserted, yet Patent Owner has not identified any applicable hearsay exception. Moreover, statements contained in non-patent literature, including internet materials, raise additional concerns regarding trustworthiness where authorship and publication details are unknown.

Finally, Exhibit 2049 lacks sufficient indicia of reliability and foundation to be considered under FRE 602 and 703. Patent Owner has not established who authored the content, when it was created, whether it reflects accepted knowledge in the field, or whether it is the type of material reasonably relied upon by experts. Without such foundational support, the exhibit should not be considered for any substantive purpose.

For at least the foregoing reasons, Petitioner objects to Exhibit 2049 under FRE 401, 402, 403, 801, 802, 901, 602, and 703, and reserves the right to seek exclusion of this exhibit.

In the alternative, Petitioner objects to any reliance on Exhibit 2049 for the truth of any statement therein and requests that the exhibit, if not excluded, be accorded no evidentiary weight.

## **Exhibit 2051**

Petitioner objects to Exhibit 2051, which consists of excerpts from *Electronic Processes in Organic Semiconductors: An Introduction* by Anna Köhler and Heinz Bässler. These objections are made to preserve Petitioner's right to seek exclusion of this exhibit.

Exhibit 2051 is not admissible evidence and should be accorded no weight. The exhibit is an incomplete excerpt from a secondary source that does not identify a publication date for the material relied upon. The only date appearing in the exhibit (March 2015) is associated with a preface and does not establish the publication date of the cited content. Accordingly, Patent Owner has not shown that the exhibit was publicly available or otherwise relevant to the time period at issue in this proceeding.

First, Exhibit 2051 lacks relevance under FRE 401 and is inadmissible under FRE 402. To be relevant, the exhibit must have a tendency to make a fact of consequence more or less probable. Here, Patent Owner has not established when the cited material was published or made publicly available. Without a reliable publication date, the exhibit cannot be shown to reflect the knowledge of a person of ordinary skill in the art at the relevant time, including the priority date of the challenged patent. Indeed, the only date referenced in the exhibit (March 2015) post-dates the alleged priority date, further undermining any asserted relevance.

Second, even if marginally relevant, any probative value is substantially outweighed by the danger of unfair prejudice, confusion of the issues, and misleading the Board under FRE 403. The exhibit invites the Board to rely on technical statements divorced from their proper temporal context, creating a risk that post-dated material or otherwise inapplicable teachings will be improperly considered. The absence of a clear publication date or complete citation exacerbates this risk.

Third, Exhibit 2051 constitutes inadmissible hearsay under FRE 801 and 802. The book excerpts contain out-of-court statements offered for the truth of the matters asserted. Patent Owner has not identified any applicable hearsay exception, nor established that the excerpts fall within any recognized category of admissible technical literature. The absence of a complete publication record further undermines reliability and admissibility.

Fourth, Exhibit 2051 lacks proper foundation and reliability under FRE 602 and 703. Patent Owner has not established that the excerpted material is from a reliably identified edition of the book, that it accurately reflects the cited source in full context, or that it is the type of material reasonably relied upon by experts without qualification. Without a complete and properly dated source, the excerpt cannot be evaluated for accuracy, completeness, or relevance to the issues in this proceeding.

Finally, Exhibit 2051 is not properly authenticated under FRE 901. Patent Owner has not provided evidence sufficient to establish that the excerpt is what it purports to be—namely, a reliable and accurately reproduced portion of a published work relevant to the issues here. In particular, the absence of a verified publication date and complete bibliographic information prevents meaningful authentication of the exhibit.

For at least the foregoing reasons, Petitioner objects to Exhibit 2051 under FRE 401, 402, 403, 801, 802, 901, 602, and 703, and reserves the right to seek exclusion of this exhibit.

In the alternative, Petitioner objects to any reliance on Exhibit 2051 for the truth of any statement therein and requests that the exhibit, if not excluded, be accorded no evidentiary weight.

### **Exhibits 2052, 2053**

Petitioner objects to Exhibits 2052 and 2053, which are U.S. Patent Nos. 9,666,817 and 9,673,258, respectively. These objections are made to preserve Petitioner's right to seek exclusion of these exhibits.

Exhibits 2052 and 2053 are not admissible evidence for the purposes for which Patent Owner appears to rely on them and should be accorded no weight. The patents published on May 30, 2017 (Ex. 2052) and June 6, 2017 (Ex. 2053), which are after the alleged priority date of the challenged '948 patent. Patent Owner has

not established that these patents qualify as prior art or otherwise reflect knowledge available to a person of ordinary skill in the art at the relevant time.

First, Exhibits 2052 and 2053 lack relevance under FRE 401 and are inadmissible under FRE 402. Absent a showing that these references were publicly available prior to the priority date of the challenged patent, they cannot be relied upon to establish the state of the art, the knowledge of a person of ordinary skill, or any fact of consequence in this proceeding. Patent Owner has not provided such a showing.

Second, even if marginally relevant, any probative value is substantially outweighed by the risk of confusion of the issues and misleading the Board under FRE 403. The exhibits invite improper reliance on references that post-date the relevant timeframe, creating a substantial risk that the Board would consider teachings that were not available to a person of ordinary skill in the art at the time of the alleged invention.

Finally, Exhibits 2052 and 2053 lack proper foundation under FRE 602 and 703 for the purposes for which they appear to be offered. Patent Owner has not established that these references are the type of materials reasonably relied upon by experts for evaluating the state of the art at the relevant time, given their post-priority publication dates.

For at least the foregoing reasons, Petitioner objects to Exhibits 2052 and 2053 under FRE 401, 402, 403, 801, 802, 602, and 703, and reserves the right to seek exclusion of these exhibits.

In the alternative, Petitioner objects to any reliance on Exhibits 2052 and 2053 for the truth of any statement therein and requests that the exhibits, if not excluded, be accorded no evidentiary weight.

#### **Exhibit 2054**

Petitioner objects to Exhibit 2054, which appears to be a printout of a webpage titled “Article Metrics” for the publication “Photon-trapping microstructures enable high-speed high-efficiency silicon photodiodes,” from Nature Photonics. These objections are made to preserve Petitioner’s right to seek exclusion of this exhibit.

Exhibit 2054 is not admissible evidence and should be accorded no weight. The exhibit is an unauthenticated printout of an internet webpage that does not identify an author, a publication date for the webpage content, or a reliable basis for the information presented. The only date appearing in the exhibit is April 6, 2026, which appears to reflect the date the page was accessed or printed, not the date the underlying information was created or made publicly available.

First, Exhibit 2054 lacks relevance under FRE 401 and is inadmissible under FRE 402. The webpage appears to present “article metrics” or “online attention”

associated with a publication, rather than substantive technical teachings. Such information does not bear on any fact of consequence in this proceeding, including the patentability of the challenged claims, the state of the art, or the knowledge of a person of ordinary skill. Patent Owner has not established any nexus between alleged “online attention” and the issues before the Board.

Second, even if marginally relevant, any probative value is substantially outweighed by the danger of unfair prejudice, confusion of the issues, and misleading the Board under FRE 403. The exhibit invites the Board to consider extraneous and potentially misleading information—namely, metrics or indicia of attention—that have no bearing on the legal standards governing patentability. Such information risks diverting the inquiry away from the merits and toward improper considerations.

Third, Exhibit 2054 is not properly authenticated under FRE 901. To satisfy the authentication requirement, the proponent must provide evidence sufficient to support a finding that the item is what it purports to be. Here, Patent Owner has provided no testimony or evidence from a person with knowledge of the webpage, its source, its contents, or the manner in which the purported “metrics” were generated. Nor has Patent Owner established that the printout accurately reflects the webpage at any relevant time. As recognized in PTAB practice, the proponent must authenticate the website itself, not merely the printout.

Fourth, Exhibit 2054 constitutes inadmissible hearsay under FRE 801 and 802. The webpage contains out-of-court statements offered for the truth of the matters asserted—namely, the purported metrics or measures of “online attention.” Patent Owner has not identified any applicable hearsay exception, and the absence of an identified author or methodology further undermines the reliability of such statements.

Finally, Exhibit 2054 lacks proper foundation and reliability under FRE 602 and 703. Patent Owner has not established how the “metrics” were generated, what they measure, whether they are accurate, or whether they are the type of information reasonably relied upon by experts in the field. Without such foundational support, the exhibit is not a proper basis for any substantive argument.

For at least the foregoing reasons, Petitioner objects to Exhibit 2054 under FRE 401, 402, 403, 801, 802, 901, 602, and 703, and reserves the right to seek exclusion of this exhibit.

In the alternative, Petitioner objects to any reliance on Exhibit 2054 for the truth of any statement therein and requests that the exhibit, if not excluded, be accorded no evidentiary weight.

Respectfully submitted,

Dated: May 19, 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 Patent Owner's Exhibits Filed with Patent Owner Response** was served on May 19, 2026, via email directed to counsel of record for Patent Owner at the following:

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Dated: May 19, 2026

/ William Esper /  
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