

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

SAMSUNG ELECTRONICS CO., LTD. AND
SAMSUNG ELECTRONICS AMERICA, INC.,

Petitioners,

v.

HARBOR ISLAND DYNAMIC, LLC,

Patent Owner.

Patent No. 9,245,826

Filing Date: January 27, 2014

Issue Date: January 26, 2016

Inventors: Hadi Jebory, David J. Howard, and Scott B. Stetson
Title: ANCHOR VIAS FOR IMPROVED BACKSIDE METAL
ADHESION TO SEMICONDUCTOR SUBSTRATE

**PATENT OWNER'S OPPOSITION TO
PETITIONER'S MOTION TO EXCLUDE EVIDENCE**

Case No. IPR2024-01405

TABLE OF CONTENTS

	<u>Page(s)</u>
I. INTRODUCTION	1
II. LEGAL STANDARDS	1
III. EXHIBIT 2007 IS AUTHENTIC AND RELEVANT	2
A. Exhibit 2007 is Authentic.....	2
B. Exhibit 2007 is Relevant	4
IV. EXHIBIT 2008 IS AUTHENTIC AND RELEVANT	5
A. Exhibit 2008 is Authentic.....	5
B. Exhibit 2008 is Relevant	6
V. CONCLUSION.....	7

TABLE OF AUTHORITIES

	Page(s)
Cases	
<i>Bancorp Servs., L.L.C. v. Hartford Life Ins. Co.</i> , 359 F.3d 1367 (Fed. Cir. 2004)	4, 7
<i>Continental Automotive Sys., Inc. v. Intellectual Ventures II, LLC</i> , IPR2022-01130, Paper No. 41 (P.T.A.B. Dec. 4, 2023)	3, 6
<i>Disney Enterprises, Inc. v. Kappos</i> , 923 F. Supp. 2d 788 (E.D. Va. 2013)	4, 7
<i>In Re Epstein</i> , 32 F.3d 1559 (Fed. Cir. 1994)	7
<i>Intel Corp. v. Pact CPP Schweiz AG</i> , IPR2020-00528, Paper No. 39 (P.T.A.B. Aug. 9, 2021)	3, 6
<i>Mercedes-Benz USA, LLC v. Daedalus Prime LLC</i> , IPR2023-01344, Paper No. 31 (P.T.A.B. January 25, 2025)	3, 6
<i>Mylan Pharms., Inc. v. Regeneron Pharms., Inc.</i> , IPR2021-00880, Paper No. 89 (P.T.A.B. Nov. 9, 2022)	1
Other Authorities	
37 C.F.R. §42.20(c)	2
37 CFR § 42.62	1
Fed. R. Evid. 901	1
Fed. R. Evid. 901(a)	1
Fed. R. Evid. 901(b)(1)	1
Fed. R. Evid. 901(b)(4)	2
Fed. R. Evid. 902	3, 6

Fed. R. Evid. 902(6).....	2
Fed. R. Evid. 902(7).....	2

EXHIBIT LIST

Exhibit No.	Description of Document
2001	Docket Control Order, Dkt. 38, in <i>Harbor Island Dynamic, LLC v. Samsung Elecs. Co.</i> , Case No. 2:24-cv-00140-JRG-RSP (E.D. Tex. Aug. 5, 2024)
2002	Order Denying Samsung’s Motion to Stay Pending <i>Inter Partes</i> Review, Dkt. 62, in <i>Harbor Island Dynamic, LLC v. Samsung Elecs. Co.</i> , Case No. 2:24-cv-00140-JRG-RSP (E.D. Tex. Dec. 19, 2024)
2003	Defendants’ Invalidity Contentions, served on September 26, 2024, in <i>Harbor Island Dynamic, LLC v. Samsung Elecs. Co.</i> , Case No. 2:24-cv-00140-JRG-RSP (E.D. Tex.)
2004	Declaration of John Berg
2005	CV of John Berg
2006	“Die Singulation Technologies for Advanced Packaging: A Critical Review” (Lei 2012)
2007	“3D vs 2D Modeling of the Effect of Die Size on Delamination in Encapsulated IC Packages” (Ho et al., 2013)
2008	“Optimizing Die Corner and Optical Groove Corner Crackstop Support Structures for Mitigating Dicing and CPI Risks” (Rabie et al., 2021)
2009	Deposition of Scott E. Thompson, taken June 9, 2025

I. INTRODUCTION

The Board should deny Petitioner's Motion because the exhibits are sufficiently authenticated and are admissible for the purpose of showing how one of skill in the art would have understood the "corner" limitation. Petitioner, however, would simply exclude the exhibits rather than defend its position (in this proceeding only) that the limitation is invalid.

As discussed below, both exhibits are sufficiently shown to be authentic based on Mr. Berg's testimony and the indicia on the face of each exhibit. Moreover, both exhibits are relevant to showing the state of the art and knowledge of a person of skill in the art at the time of the invention. The Board should therefore deny the Motion.

II. LEGAL STANDARDS

The Board applies the Federal Rules of Evidence. 37 CFR § 42.62. "Federal Rule of Evidence 901 sets a relatively low bar for authentication." *Mylan Pharms., Inc. v. Regeneron Pharms., Inc.*, IPR2021-00880, Paper No. 89 at 15 (P.T.A.B. Nov. 9, 2022).

"To satisfy the requirement of authenticating or identifying an item of evidence, the proponent must produce evidence sufficient to support a finding that the item is what the proponent claims it is." FRE 901(a). The testimony of a witness with knowledge is sufficient to authenticate a document. FRE 901(b)(1). A

document's own "distinctive characteristics" can further serve to authenticate a document. FRE 901(b)(4) ("The appearance, contents, substance, internal patterns, or other distinctive characteristics of the item, taken together with all the circumstances."). Documents that are parts of periodicals are self-authenticating, FRE 902(6), as are documents that include "An inscription, sign, tag, or label purporting to have been affixed in the course of business and indicating origin, ownership, or control." FRE 902(7).

As the movant, Petitioner bears the burden of proving it is entitled to the relief sought, in this case, exclusion. 37 C.F.R. §42.20(c).

III. EXHIBIT 2007 IS AUTHENTIC AND RELEVANT

Patent Owner has provided sufficient evidence that Exhibit 2007 is a paper published by IEEE in 2013. Moreover, Exhibit 2007 is relevant for the purposes of showing the knowledge of one of skill in the art.

A. Exhibit 2007 Is Authentic

As Mr. Berg's declaration explains, Exhibit 2007 is a paper entitled "3D vs 2D Modeling of the Effect of Die Size on Delamination in Encapsulated IC Packages" and published in 2013. Ex. 2004, ¶ 51, Ex. 2007. It bears distinctive indicia of authenticity: the ISBN number 978-1-4799-0232-3, an IEEE copyright notice, and publication date of 2013, begins on page 807 of a larger volume, and

indicates that it is downloaded from and stored on IEEE Xplore.¹ Ex. 2007. The document is further and currently available for download on IEEE Xplore.² “Such indicia have been found to be sufficient to support authentication.” *Continental Automotive Sys., Inc. v. Intellectual Ventures II, LLC*, IPR2022-01130, Paper No. 41 at 12 (P.T.A.B. Dec. 4, 2023); *see also Mercedes-Benz USA, LLC v. Daedalus Prime LLC*, IPR2023-1344, Paper No. 31 at 41 (P.T.A.B. January 25, 2025) (finding IEEE Xplore evidence sufficient to show date of publication).

The document is also self-authenticating under FRE 902. It bears a copyright notice, ISBN, and is paginated (starting at page 807) showing that it was part of a larger document. *Intel Corp. v. Pact CPP Schweiz AG*, IPR2020-00528, Paper No. 39 (P.T.A.B. Aug. 9, 2021) (copyright notice, ISBN, pagination sufficient to show that paper was authentic printed publication). Accordingly, Exhibit 2007 is authentic.

¹ “IEEE Xplore is the flagship digital platform for discovery and access to scientific and technical content published by the IEEE (Institute of Electrical and Electronics Engineers) and its publishing partners.” *About IEEE Xplore*, <https://ieeexplore.ieee.org/Xplorehelp/overview-of-ieee-xplore/about-ieee-xplore>, last visited Dec. 4, 2025.

² <https://ieeexplore.ieee.org/document/657566>

B. Exhibit 2007 Is Relevant

Exhibit 2007 is also relevant to the construction of “corner.” Despite contending in District Court that clear and convincing evidence showed the term to be indefinite, Petitioner argued that this term required no construction. Pet., 20. Petitioner’s relevance challenge is premised entirely on Exhibit 2007 being published (potentially) after the ’826 Patent’s priority date. Paper 27 at 2-3. However, Patent Owner does not use Exhibit 2007 for prior art purposes.

Instead, Patent Owner uses Exhibit 2007 to illustrate that one of skill in the art at the time of the invention would know that a die is most likely to fracture near corner edges. POR, 21-22. Documents that do not qualify as prior art are nonetheless relevant and probative of the knowledge of one of skill in the art. *Bancorp Servs., L.L.C. v. Hartford Life Ins. Co.*, 359 F.3d 1367, 1375 (Fed. Cir. 2004) (reversing judgment of indefiniteness because District Court improperly refused to consider non-prior art documents as showing level of knowledge); *Disney Enterprises, Inc. v. Kappos*, 923 F. Supp. 2d 788, 800-01 (E.D. Va. 2013) (holding publications published after patent’s priority date “relevant to understanding the state of the art” at the time of the invention).

Here, Exhibit 2007 is relevant to showing the knowledge of one of skill in the art at the time of the invention. While published a few months after the ’826 Patent’s

provisional application date of March 2013,³ “‘common sense’ dictates that the content of these articles must have been developed around the time of the invention if not before.” *Id.* at 801. Petitioner’s arguments that Exhibit 2007 is dated too late to be probative are properly directed to the weight the Board should give the evidence, not the admissibility. Accordingly, Exhibit 2007 is admissible.

IV. EXHIBIT 2008 IS AUTHENTIC AND RELEVANT

Patent Owner has provided sufficient evidence that Exhibit 2008 is a paper published by IEEE in 2021. Moreover, Exhibit 2008 is relevant for the purposes of showing the knowledge of one of skill in the art.

A. Exhibit 2008 Is Authentic

As with Exhibit 2007, and for the same reasons, Exhibit 2008 is sufficiently shown to be authentic.

As Mr. Berg’s declaration explains, Exhibit 2008 is a paper entitled “Optimizing Die Corner and Optical Groove Corner Crackstop Support Structures for Mitigating Dicing and CPI Risks” and published in 2021. Ex. 2004, ¶ 52, Ex. 2008. It bears distinctive indicia of authenticity: the ISSN number 2377-5726, an

³ Per IEEE, the conference at which the paper was distributed was held in May 2013, and Exhibit 2007 was added to IEEE Xplore in August 2013.
<https://ieeexplore.ieee.org/document/6575666>

IEEE copyright notice, and publication date of 2021, begins on page 1391 of a larger volume, and indicates that it is downloaded from and stored on IEEE Xplore. Ex. 2007. The document is further and currently available for download on IEEE Xplore.⁴ “Such indicia have been found to be sufficient to support authentication.” *Continental Automotive Sys.*, IPR2022-01130, Paper No. 41 at 12; *see also Mercedes-Benz USA, LLC*, IPR2023-01344, Paper No. 31 at 41 (finding IEEE Xplore evidence sufficient to show date of publication).

The document is also self-authenticating under FRE 902. It bears a copyright notice, ISBN, and is paginated (starting at page 1391) showing that it was part of a larger document. *Intel Corp.*, IPR2020-528, Paper No. 39 (copyright notice, ISBN, pagination sufficient to show that paper was authentic printed publication). Accordingly, Exhibit 2008 is authentic.

B. Exhibit 2008 Is Relevant

Exhibit 2008 is also relevant to the construction of “corner.” Petitioner’s relevance challenge is premised entirely on Exhibit 2008 being published (potentially) after the ’826 Patent’s priority date. Paper 27 at 5-6. However, like Exhibit 2007, Patent Owner does not use Exhibit 2008 for prior art purposes.

Instead, Patent Owner uses Exhibit 2008 to illustrate that one of skill in the art at the time of the invention would know that a die is most likely to fracture near

⁴ <https://ieeexplore.ieee.org/document/9501850>

corner edges. POR, 22-24. Documents that do not qualify as prior art are nonetheless relevant and probative of the knowledge of one of skill in the art. *Bancorp Servs.*, 359 F.3d at 1375; *Disney Enterprises*, 923 F. Supp. 2d at 800-01.

Here, Exhibit 2008 is relevant to showing the knowledge of one of skill in the art at the time of the invention. While published after the '826 Patent's provisional application date of March 2013,⁵ it can still serve to show what was known at the time of the invention. *In Re Epstein*, 32 F.3d 1559, 1563, 1567 (Fed. Cir. 1994) (holding that BPAI did not err in relying on documents years after priority date to show state of the art). Petitioner's arguments that Exhibit 2008 is dated too late to be probative are properly directed to the weight the Board should give the evidence, not the admissibility. Accordingly, Exhibit 2008 is admissible.

V. CONCLUSION

For the foregoing reasons, Patent Owner respectfully requests that the Board deny Petitioner's Motion to Exclude in its entirety.

⁵ Per IEEE, the conference at which the paper was distributed was held in June 2021, and Exhibit 2008 was added to IEEE Xplore in August 2021. <https://ieeexplore.ieee.org/document/9501850>

Respectfully submitted,

Dated: December 8, 2025

By: /Joseph M. Mercadante /
Joseph M. Mercadante (Reg. No. 64,077)
Lead Counsel for Patent Owner
FABRICANT LLP
411 Theodore Fremd Avenue,
Suite 206 South
Rye, New York 10580
Tel. 212-257-5797
Fax. 212-257-5796
Email: jmercadante@fabricantllp.com

CERTIFICATE OF SERVICE

A copy of Patent Owner's OPPOSITION TO PETITIONER'S MOTION TO EXCLUDE EVIDENCE has been served on Petitioner's counsel of record as follows:

Joshua L. Goldberg
Email: joshua.goldberg@finnegan.com
Alexander E. Harding
Email: alexander.harding@finnegan.com
Chen Zang
Email: chen.zang@finnegan.com
**FINNEGAN, HENDERSON, FARABOW,
GARRETT & DUNNER, LLP**
901 New York Avenue NW
Washington, DC 20001-4413

Abhay A. Watwe
Email: abhay.watwe@finnegan.com
Biju I. Chandran
Email: biju.chandran@finnegan.com
**FINNEGAN, HENDERSON, FARABOW,
GARRETT & DUNNER, LLP**
1875 Explorer Street, Suite 800
Reston, VA 20190-6023

Shawn S. Chang
Email: shawn.chang@finnegan.com
**FINNEGAN, HENDERSON, FARABOW,
GARRETT & DUNNER, LLP**
271 17th Street, NW, Suite 1400
Atlanta, GA, 30363-6209

*Attorneys for Samsung Electronics Co., Ltd.;
Samsung Electronics America, Inc.*

IPR2024-01405
PATENT NO. 9,245,826

December 8, 2025

By: /Joseph M. Mercadante /
Joseph M. Mercadante (Reg. No. 64,077)
Lead Counsel for Patent Owner