

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

MIANYANG BOE OPTOELECTRONICS TECHNOLOGY CO., LTD.; WUHAN
CHINA STAR OPTOELECTRONICS SEMICONDUCTOR DISPLAY
TECHNOLOGY CO., LTD.; TIANMA MICROELECTRONICS CO., LTD.; AND
VISIONOX TECHNOLOGY, INC.,
Petitioner,

v.

SAMSUNG DISPLAY CO., LTD.
Patent Owner.

Case No. IPR2023-00988
Patent No. 10,854,683 B2

**NOTICE OF FILING OF PATENT OWNER'S HEARING
DEMONSTRATIVES AND UPDATED EXHIBIT LIST**

Pursuant to 37 C.F.R. § 42.70(b) and the Board’s Order Setting Oral Argument in this matter (Paper 35), Patent Owner Samsung Display Co., Ltd. is hereby filing a copy of its demonstratives for the oral hearing as Exhibit 2087.

TABLE OF EXHIBITS

Exhibit	Description
2001	Claim Construction Order, Inv. No. 337-TA-1351
2002	Joint Statement of Agreed Upon and Disputed Claim Terms (6-29-2023)
2003	U.S. Patent No. 5,644,327
2004	Declaration of Daniel W. Cho
2005	Declaration of Matthew Kudzin
2006	Declaration of Kee Young Lee
2007	Declaration of Jeffrey H. Lerner
2008	INTENTIONALLY LEFT BLANK
2009	Declaration of Ioannis Kymissis, Ph.D.
2010	Curriculum Vitae of Ioannis Kymissis, Ph.D.
2011	U.S. Patent No. 6,747,618 (“Arnold”)
2012	U.S. Patent No. 8,716,929 (“Yoo”)
2013	Korea Industry Post, <i>Popularity of Galaxy S4 to Kickstart Demand for AMOLED Market</i> , (2013)
2014	Dr. Raymond M. Soneria, <i>Galaxy S4 Display Technology Shoot-Out</i> , DisplayMate Technologies

2015	U.S. Patent No. 9,697,760 (“Wang”)
2016	Jiin-Joi Lih et al., <i>The Challenge of High Resolution to Active-Matrix OLED</i> , Society for Information Display (2006)
2017	Ho-Kyoon Chung et al., <i>AMOLED Technology for Mobile Displays</i> , Society for Information Display (2006)
2018	U.S. Patent Publication No. 2007/0278933 (“Chao”)
2019	Excerpts from Society of Information Display, <i>Mobile Display Technology and Applications</i> (Achintya K. Bhowmik et al.) (2008)
2020	Journal of Display Technology, <i>New Pixel Design on Emitting Area for High Resolution Active-Matrix Organic Light-Emitting Diode Displays</i> (Soon-Kwang Hong et al.) (2010)
2021	U.S. Patent Publication No. 2008/001525 (“Chao”)
2022	Bogdan Petrovan, <i>Diamond Pixels: Galaxy S4’s Unique Subpixel Arrangement Gets a Close Up</i> (2013)
2023	Hyunjung Jung, <i>History of Advancement of ‘AMOLED’, Core Competitiveness of Galaxy</i> (2014) (including certified English translation)
2024	Nell Hughes, <i>Apple Won’t Adapt AMOLED Displays in iPhones Until 2019 at the Earliest, Insider Says</i> (2015)
2025	Dr. Raymond M. Soneira, <i>Smartphone “Super” LCD-OLED Display Technology Shoot-Out</i> , DisplayMate Technologies
2026	Jin-Gyu Meyong, <i>Sharper Galaxy S4, the Secret Weapon is the ‘Diamond’</i> (2013) (including certified English translation)
2027	Dr. Raymond M. Soneira, <i>Samsung Diamond Pixels</i> , DisplayMate Technologies
2028	Samsung Galaxy S22 Ultra AMOLED Display Claim Chart
2029	Teardown Photos of Samsung Galaxy S22 Ultra Product

2030	INTENTIONALLY LEFT BLANK
2031	INTENTIONALLY LEFT BLANK
2032	INTENTIONALLY LEFT BLANK
2033	Chung-Chia Chen et al., <i>Low Power Consumption and Wide Color Gamut AMOLED Display with Four Primary Colors</i> , Society for Information Display (2015)
2034	<i>Detailed Explanation: Why Zhou Dongyu's BOE Screen is Not as Good as Samsung Screen</i>
2035	Xiaojian, <i>What Exactly was the Scolded "Dongyu Zhou" Screen Like? Is it Really Unusable?</i> (2020)
2036	Li-Qin Shao et al., <i>The Development of 403ppi Real RGB Printing AMOLED</i> , Society of Information Display (2019)
2037	Hyungsoo Lee, <i>Secret to the Face of Galaxy S4, Reason for Striking Resolution</i> (2013) (including certified English translation)
2038	Chris Davies, <i>The iPhone X has the Best Smartphone Display Around</i> (2017)
2039	Dr. Raymond M. Soneira, <i>iPhone X Display Technology Shoot-Out</i> , DisplayMate Technologies
2040	Bryan Jones, <i>iPhone X Pixels</i> (2017), Jonesblog
2041	<i>Samsung Display Co., Ltd. v. BOE Tech. Co. Ltd. et al.</i> , Case No. 2-23-cv-00309, Compl. (E.D. Tex. Jun. 26, 2023)
2042	Group Vertical AMOLED Display Claim Chart
2043	Sourcely Plus AMOLED Display Claim Chart
2044	Teardown Photos of Group Vertical Product
2045	Teardown Photos of Phone LCD Parts Product
2046	Teardown Photos of Sourcely Plus Product

2047	Teardown Photos of eTech Parts Product
2048	Teardown Photos of Parts4LCD Product
2049	Teardown Photos of MobileSentry Product
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2051	Teardown Photos of Injured Gadgets Product
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2053	Teardown Photos of Repairs Universe Product
2054	Teardown Photos of SEGMobile Product
2055	Teardown Photos of Parts4Cells Product
2056	Teardown Photos of Wholesale Gadget Parts Product
2057	Teardown Photos of Captain Mobile Parts Product
2058	Teardown Photos of DFW Products
2059	Teardown Photos of Mengtor Product
2060	Teardown Photos of Gadgetfix Product
2061	Declaration of Aris Silzars, Ph.D.
2062	Transcript of March 20, 2024 Deposition of Dr. Morgan Pattison
2063	Declaration of Adam Fontecchio, Ph.D.
2064	Sung-eun Kim, <i>Climbing Mt. Fuji on Handstand?</i> (including certified English translation)
2065	Yoon Jeong-hyun, <i>Samsung Display Achieves the Highest Definition Quality With Tenacity, Full HD AMOLED "Revolution,"</i> BIZ Insight (2013) (including certified English translation)

2066	<i>Public-Private Commitment to Ceaseless Effort for Display Super Gap</i> , Ministry of Trade, Industry, and Energy (2023)
2067	Dr. Raymond M. Soneira, <i>About Display Mate Technologies</i> , DisplayMate Technologies
2068	Dr. Raymond M. Soneira, <i>iPhone XS Max Diamond Sub-Pixels</i> , DisplayMate Technologies
2069	Dr. Raymond M. Soneira, <i>iPhone X Diamond Sub-Pixels</i> , DisplayMate Technologies
2070	Dr. Raymond M. Soneira, <i>iPhone 14 Pro Max Diamond Pixels</i> , DisplayMate Technologies
2071	Dr. Raymond M. Soneira, <i>iPhone 13 Pro Max Diamond Pixels</i> , DisplayMate Technologies
2072	Dr. Raymond M. Soneira, <i>iPhone 12 Pro Max Diamond Sub-Pixels</i> , DisplayMate Technologies
2073	Amal Ghosh et al., <i>Short Course S-1: Fundamentals of OLEDs</i> , Society for Information Display
2074	G. Gu et al., <i>Design of Flat-Panel Displays Based on Organic Light-Emitting Devices</i> , IEEE Journal on Selected Topics in Quantum Electronics, Vol. 4, No. 1, (1998)
2075	DE Patent No. 10 2011 053 000 B4 (including certified English translation)
2076	D. Braun, <i>Crosstalk in Passive Matrix Polymer LED Displays</i>
2077	Jong In Park et al., <i>Direct Prediction Methods on Lifetime Distribution of Organic Light-Emitting Diodes From Accelerated Degradation Tests</i> , IEEE Transactions on Reliability, Vol. 59, No. 1 (Mar. 2010)
2078	Priyanka Tyagi et al., <i>Degradation of Organic Light Emitting Diode: Heat Related Issues and Solutions</i> , Synthetic Metals 216 (2016)

2079	M.M. Azrain et al., <i>Analysis of Mechanisms Responsible for the Formation of Dark Spots in Organic Light Emitting Diodes (OLEDs): A Review</i> , Synthetic Metals 235 (2018).
2080	Jiun-Haw Lee et al., <i>Introduction to Flat Panel Displays</i> , Society of Information Display (2008)
2081	U.S. Patent Publication No. 2011/0234550 (“Hong”)
2082	Declaration of Daniel W. Cho
2083	Excerpts from Dr. Pattison’s Trial Testimony in <i>Certain Active Matrix Organic Light-Emitting Diode Display Panels and Modules for Mobile Devices, and Components Thereof</i> , Inv. No. 337-TA-1351 (Int’l Trade Comm’n, July 8-9, 2024) <i>(served at Dr. Pattison’s reply deposition on July 30, 2024 and submitted as an exhibit to support Patent Owner’s sur-reply pursuant to the Board’s guidance on July 31, 2024, see Ex. 3002)</i>
2084	Excerpts from Nilsson & Riedel, <i>Electric Circuits</i> (5th ed. 1996) <i>(served at Dr. Pattison’s reply deposition)</i>
2085	Excerpts from Kaplan, <i>Wiley Electrical and Electronics Engineering Dictionary</i> (2004) <i>(served at Dr. Pattison’s reply deposition)</i>
2086	Transcript of July 30, 2024 Deposition of Morgan Pattison, Ph.D.
2087	Patent Owner’s Hearing Demonstratives

Date: October 4, 2024

Respectfully submitted,

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CERTIFICATE OF SERVICE

Pursuant to 37 C.F.R. § 42.6, I hereby certify that the foregoing Notice of Filing of Patent Owner's Hearing Demonstratives and Updated Exhibit List, together with Exhibit 2087, was served by electronic mail on the following counsel of record for petitioner:

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