UNITED STATES PATENT AND TRADEMARK OFFICE

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BEFORE THE PATENT TRIAL AND APPEAL BOARD

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MICRON TECHNOLOGY, INC.,

Petitioner,

v.

VERVAIN, LLC,

Patent Owner.

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Case No.: IPR2021-01547
U.S. Patent No. 8,891,298
Original Issue Date: November 18, 2014

Title: LIFETIME MIXED LEVEL NON-VOLATILE MEMORY SYSTEM

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PETITIONER'S REPLY

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Cases

LISTING OF EXHIBITS

Exhibit	Description
1001	U.S. Patent No. 8,891,298 to Rao ("298 patent")
1002	File History of U.S. Patent No. 8,891,298
1003-1008	*Intentionally omitted*
1009	Declaration of Dr. David Liu ("Liu Decl.") - IPR2021-01547
1010	U.S. Patent Application Publication No. 2011/0099460 ("Dusija")
1011	U.S. Patent Application Publication No. 2008/0140918 ("Sutardja")
1012	U.S. Patent Application Publication No. 2009/0327591 ("Moshayedi")
1013	U.S. Patent No. 7,254,059 ("Li")
1014	Betty Prince, Semiconductor Memories – A Handbook of Design, Manufacture, and Application (2d ed. 1991) ("Prince")
1015	U.S. Patent No. 8,120,960 ("Varkony")
1016	U.S. Patent No. 7,000,063 ("Friedman")
1017	U.S. Patent Application Publication No. 2005/0251617 ("Sinclair")
1018	Jan Axelson, USB Mass Storage: Designing and Programming Devices and Embedded Hosts (2006) ("Axelson")
1019	Rino Micheloni et al., Inside NAND Flash Memories (1st ed. 2010) ("Micheloni")
1020	U.S. Patent Application Publication No. 2011/0115192 ("Y. Lee")

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1023	U.S. Patent No. 8,078,794 ("C. Lee")
1024	U.S. Patent No. 7,733,729 ("Boeve")
1025	Microsoft Computer Dictionary, Fifth Edition, 2002, definition of read-after-write
1026	Merriam-Webster's Collegiate Dictionary, Eleventh Edition, 2006, definition of periodic
1027	New Oxford American Dictionary, 3rd Edition, 2010, definition of module
1028	U.S. Patent Application Publication No. 2010/0172180 ("Paley")
1029	U.S. Patent No. 7,853,749 ("Kolokowsky")
1030	U.S. Patent Application Publication No. 2010/0017650 ("Chin")
1031	European Patent Specification No. EP 2.291.746 B1 ("Radke")
1032	U.S. Patent Application Publication No. 2015/0214476 ("Matsui")
1033	U.S. Patent Application Publication No. 2006/0053246 ("S. Lee")
1034	Complaint for Patent Infringement, Dkt. No. 1, *Vervain, LLC v. Micron Technology, Inc., Micron Semiconductor Products, Inc., and Micron Technology Texas, LLC*, Case No. 6:21-cv-00487-ADA (May 10, 2021 W.D. Tex.)

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