

**UNITED STATES PATENT AND TRADEMARK OFFICE
BEFORE THE PATENT TRIAL AND APPEAL BOARD**

MICRON TECHNOLOGY, INC.,
Petitioner,

v.

VERVAIN, LLC,
Patent Owner.

Case No.: IPR2021-01549
U.S. Patent No. 9,997,240
Original Issue Date: June 12, 2018

Title: LIFETIME MIXED LEVEL NON-VOLATILE MEMORY SYSTEM

PETITIONER'S REPLY

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<i>Evolusion Concepts, Inc. v. HOC Events, Inc.</i> , 22 F.4th 1361 (Fed. Cir. 2022)	3
<i>Microprocessor Enhancement Corp. v. Texas Instruments Inc.</i> , 520 F.3d 1367 (Fed. Cir. 2008)	6
<i>Microsoft Corp. v. FG SRC, LLC</i> , 860 Fed. App'x. 708	15
<i>Novo Nordisk A/S v. Eli Lilly & Co.</i> , 1999 WL 1094213 (D. Del. Nov. 18, 1999).....	3

LISTING OF EXHIBITS

Exhibit	Description
1001	U.S. Patent No. 8,891,298 (the “298 patent”)
1002-1004	<i>Intentionally omitted</i>
1005	U.S. Patent No. 9,997,240 (the “240 patent”)
1006	File History of U.S. Patent No. 9,997,240
1007-1008	<i>Intentionally omitted</i>
1009	Declaration of Dr. David Liu (“Liu Decl.”) – IPR2021-01549
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	<i>Intentionally omitted</i>
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 (1 st ed. 2010) (“Micheloni”)

Exhibit	Description
1020	U.S. Patent Application Publication No. 2011/0115192 (“Y. Lee”)
1021	U.S. Patent No. 7,453,712 (“Kim”)
1022	U.S. Patent Application Publication No. 2011/0096601 (“Gavens”)
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, 3 rd 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	<i>Intentionally omitted</i>
1034	Complaint for Patent Infringement, Dkt. No. 1, <i>Vervain, LLC v. Micron Technology, Inc., Micron Semiconductor Products, Inc., and Micron Technology Texas, LLC</i> , Case No. 6:21-cv-00487-ADA (May 10, 2021 W.D. Tex.)

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