

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

MICRON TECHNOLOGY, INC.,

Petitioner,

v.

YANGTZE MEMORY TECHNOLOGIES COMPANY, LTD.,

Patent Owner.

Case IPR2024-00794
Patent 10,950,623

**DECLARATION OF JONATHAN BRADFORD
IN SUPPORT OF PATENT OWNER'S PRELIMINARY RESPONSE
UNDER 37 C.F.R. § 42.107**

1. I, Jonathan Bradford, make the following Declaration pursuant to 28 U.S.C. § 1746: I am a Senior IP Paralegal at the law firm of Ropes & Gray LLP.

2. I provide this Declaration in connection with the above-identified *Inter Partes* Review proceeding that is before the United States Patent and Trademark Office (“USPTO”). Unless otherwise stated, the facts stated in this Declaration are based on my personal knowledge.

3. Ex. 2001 is a true and correct copy of Cho et al., “A Dual-Mode NAND Flash Memory: 1-Gb Multilevel and High-Performance 512-Mb Single-Level Modes,” IEEE J. of Solid-State Circuits, Vol. 36, No. 11, November 2001, which was obtained at my direction. This document has been marked with an exhibit label and page numbers on each page at the bottom right corner. However, no alterations, other than these noted markings, have been made to this document.

4. Ex. 2002 is a true and correct copy of Lee et al., “Applications of AFM in semiconductor R&D and manufacturing at 45 nm technology node and beyond,” Metrology, Inspection, and Process Control for Microlithography, Vol. 7272, SPIE, 2009, which was obtained at my direction. This document has been marked with an exhibit label and page numbers on each page at the bottom right corner. However, no alterations, other than these noted markings, have been made to this document.

5. Ex. 2003 is a true and correct copy of Xiao et al., “A high speed low power negative sensing architecture for 3D NAND Flash memory,” 2016 China Semiconductor Technology International Conference (CSTIC), Shanghai, China, 2016, which was obtained at my direction. This document has been marked with an exhibit label and page numbers on each page at the bottom right corner. However, no alterations, other than these noted markings, have been made to this document.

6. Ex. 2004 is a true and correct copy of Bergonzoni, et al., “Reset Current Scaling in Phase-Change Memory Cells: Modeling and Experiments,” IEEE Transactions on Electron Devices, Vol. 59, No. 2, 283-291, Feb. 2012, which was obtained at my direction. This document has been marked with an exhibit label and page numbers on each page at the bottom right corner. However, no alterations, other than these noted markings, have been made to this document.

7. Ex. 2005 is a true and correct copy of Seshan et al., Handbook of Thin Film Deposition, Abstract, 2018, which was obtained at my direction. This document has been marked with an exhibit label and page numbers on each page at the bottom right corner. However, no alterations, other than these noted markings, have been made to this document.

8. Ex. 2006 is a true and correct copy of Choi et al., “Novel ESD protection transistor including SiGe buried layer to reduce local temperature

overheating,” IEEE Transactions on Electron Devices, Vol. 43, No. 3, 479-489, March 1996, which was obtained at my direction. This document has been marked with an exhibit label and page numbers on each page at the bottom right corner. However, no alterations, other than these noted markings, have been made to this document.

9. Certain pages have been resized to 8.5 x 11 inches. No content was removed by this resizing.

10. I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under 18 U.S.C. § 1001. If called to testify as to the truth of the matters stated herein, I could and would testify competently.

11. I declare under penalty of perjury that the foregoing is true and correct.

Executed this 29th day of July, 2024, in Boston, Massachusetts.

/Jonathan Bradford/
Jonathan Bradford
ROPES & GRAY LLP