UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

MICRON TECHNOLOGY, INC., Petitioner

v.

VERVAIN, LLC, Patent Owner

Case No.: IPR2021-01550 U.S. Patent No. 10,950,300 Original Issue Date: March 16, 2021

Title: LIFETIME MIXED LEVEL NON-VOLATILE MEMORY SYSTEM

REPLY DECLARATION OF DR. DAVID LIU

TABLE OF CONTENTS

I.	INTRODUCTION							
II.	EDUCATION BACKGROUND, PROFESSIONAL EXPERIENCE, AND OTHER QUALIFICATIONS							
III.	ASSIGNMENT AND MATERIALS CONSIDERED							
IV.	UNDERSTANDING OF THE LAW							
V.	LEVEL OF SKILL IN THE ART							
VI.	THE 300 PATENT'S EFFECTIVE FILING DATE							
VII.	GROUND 1: DUSIJA IN VIEW OF THE KNOWLEDGE OF A POSA							
	A.	Lim	mitation [1.E]7					
		1.	The Claims Do Not Require the "Random Access Volatile Memory" to Be in a Specific Location					
		2.		POSA Would Not Have Been Discouraged from Using usija with a Controller RAM Cache8				
			a.	-	ja Does Not Require the Use of a Flash hory Cache			
			b.		OSA Would Have Understood Dusija's ntroller" to Have RAM11			
			c.	The Proposed Combination Does Not "Change the Fundamental Principle of Dusija's Operation"12				
				i.	A POSA Would Have Recognized That the Use of Controller RAM Cache with Dusija Would Be Operable and Desirable13			
				ii.	A POSA Would Have Understood That Avoiding Toggling Is Not "Fundamental" to Dusija			
				 111.	A POSA Would Have Understood That Avoiding a Rewrite Is Not Fundamental to Dusija			

2

		(Men	A POSA Would Have Known That a Flash Memory Cache Has Many Disadvantages When Compared to a Cache in Controller RAM19			
			i.	A POSA Would Have Known That the Use of a Flash Memory Cache Puts Substantial Extra Wear on the Flash Memory20			
			ii.	A POSA Would Have Known That a Flash Memory Cache Would Typically Have Slower Real-World Performance Than a RAM Cache			
			iii.	A POSA Would Have Known That the Use of a Flash Memory Cache in Dusija Would Lead to Greater Cost and Complexity24			
			iv.	A POSA Would Have Recognized a Performance Disadvantage in Putting the Comparison Logic on a Flash Memory Chip25			
]	 The Use of A "Random Access Volatile Memory" In Place of Dusija's Flash Memory Cache Would Have Predictable Results to A POSA				
	B.	Limita					
	C.	Other Limitations					
VIII.	DECI	DECLARATION					

I, Dr. David Liu, hereby declare as follows:

I. INTRODUCTION

1. I have been retained by Micron Technology, Inc. ("Micron") as an independent expert consultant in this proceeding before the United States Patent and Trademark Office ("PTO"). I am not an employee of Micron or any affiliate or subsidiary of Micron.

2. I have been asked to consider whether certain references teach or suggest the features recited in certain claims of U.S. Patent No. 10,950,300, which I refer to herein as the 300 Patent, and whether certain claims of the 300 Patent are unpatentable as obvious.

3. My opinions and the bases for my opinions are set forth below.

4. I am being compensated at \$550 per hour for my work, plus reimbursement for any reasonable expenses. My compensation is based solely on the amount of time that I devote to activity related to this case and is in no way contingent on the nature of my findings, the presentation of my findings in testimony, or the outcome of this or any other proceeding. I have no other financial interest in this proceeding.

II. EDUCATION BACKGROUND, PROFESSIONAL EXPERIENCE, AND OTHER QUALIFICATIONS

5. My education, background, and professional qualifications are set forth in Paragraphs 5–14 of the previous declaration that was submitted in

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connection with this proceeding (which I understand has been designated as Exhibit 1009). My curriculum vitae ("CV") is included as Exhibit 1058 and provides an accurate identification of my background and experience.

III. ASSIGNMENT AND MATERIALS CONSIDERED

6. I have been asked to provide some additional opinions and elaboration regarding the state of the art and the understanding of a person of skill in the art ("POSA") as of the effective filing date of the 300 Patent.

7. The opinions expressed in this declaration are not exhaustive of my opinions regarding the unpatentability of the claims of the 300 Patent. Therefore, the fact that I do not address a particular point should not be understood to indicate an agreement on my part that any claim complies with the requirements of any applicable patent or other rule.

8. I reserve the right to amend and supplement this declaration in light of additional evidence, arguments, or testimony presented during this IPR or related proceedings on the 300 Patent.

9. In forming the opinions set forth in this declaration, I have considered and relied upon my education, knowledge of the relevant field, knowledge of scientific and engineering principles, and my experience. I have also reviewed and considered the 300 Patent (Exhibit 1007), its prosecution history (Exhibit 1008), the materials listed in my prior declaration (Exhibit 1009), the materials cited in

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