WICRON TECHNOLOGY, INC., Petitioner, v. VERVAIN, LLC, Patent Owner. IPR2021-01547 U.S. Patent No. 8,891,298

DECLARATION OF SUNIL P. KHATRI IN SUPPORT OF PATENT OWNER'S RESPONSE



Declaration of Sunil P. Khatri, Ph. D. IPR2021-01547 U.S. Patent No. 8,891,298

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	BACCON CON PERSON TECTOR A. B. C. THE CLACA. A. B. C. THE CLACA. C. THE SUG	BACKGROUND AND QUALIFICATIONS SCOPE OF ASSIGNMENT AND MATERIALS CONSIDERED PERSON OF ORDINARY SKILL IN THE ART GENERAL BACKGROUND OF THE RELEVANT TECHNOLOGY A. SLC and MLC Flash B. Address Table C. Data Integrity Tests D. Hot and Cold Data THE '298 PATENT CLAIM CONSTRUCTION A. "blocks" (claims 1, 2) B. "data integrity test" (claim 1) C. "on a periodic basis" (claim 11) OVERVIEW OF THE PRIOR ART A. Dusija (Ex. 1010) B. Sutardja (Ex. 1011)



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1. Limitation [1.F] - "determine which of the blocks of the plurality of the blocks in the MLC and SLC non-volatile memory modules are accessed most frequently by maintaining a count of the number of times each one of the blocks is accessed"	A.	Dusija in View of Sutardja Does not Disclose or Suggest All the Features of Claims 1-5 and 11 (Ground 1)		
that receive the most frequent writes by transferring the respective contents of those blocks to the at least one SLC non-volatile memory module"		1.	blocks of the plurality of the blocks in the MLC and SLC non-volatile memory modules are accessed most frequently by maintaining a count of the number of times each one of the	0
 B. Dusija in View of Sutardja and Li Does Not Disclose or Suggest All the Features of Claims 8 and 9 (Ground 2)		2.	that receive the most frequent writes by transferring the respective contents of those blocks to the at least one SLC non-volatile	1
Disclose or Suggest All the Features of Claims 8 and 9 (Ground 2)		3.	Claims 2-5 and 11 (Ground 1)6	3
Obvious Claims 1-5 and 11 (Ground 3)	B.	Disc	lose or Suggest All the Features of Claims 8	
Disclose or Suggest Transferring Contents of Blocks to SLC as in Limitation [1.G]	C.		· ·	4
Disclosures Regarding Logical Block Addresses Is Erroneous for the "Blocks" of Limitations [1.F] and [1.G]		1.	Disclose or Suggest Transferring Contents of	4
		2.	Disclosures Regarding Logical Block Addresses Is Erroneous for the "Blocks" of	9
D Moshavedi in View of Dusija and Sutardia Does		3.	Claims 2-5 and 11 (Ground 3)7	3
Not Disclose or Suggest All the Features of Claim 11 (Ground 4)	D.	Not		3



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	E.	Moshayedi in View of Dusija and Li Does Not Disclose or Suggest All the Features of Claims 8 and 9 (Ground 5)
X.	CON	NCLUSION7



DECLARATION OF SUNIL P. KHATRI, PH. D

I, Sunil P. Khatri, do hereby declare as follows:

I. INTRODUCTION

- 1. I have been retained on behalf of Vervain, LLC ("Vervain"), and its counsel, McKool Smith, P.C., as an expert in this proceeding. I am personally knowledgeable about the matters stated herein and am competent to make this declaration.
- 2. I understand that Vervain will submit this Declaration in connection with the Patent Owner's Response in IPR2021-01547, which I have been informed is an *inter partes* review (IPR) proceeding challenging the patentability of certain claims of U.S. Patent No. 8,891,298 ("the '298 patent" or "the challenged patent").
- 3. I receive compensation at an hourly rate of \$700 per hour for my time working on this matter, plus expenses. I have no financial interest in Vervain or in the patents involved in this litigation, and my compensation is not dependent on the outcome of this litigation. The conclusions I present are due to my own judgment.

II. BACKGROUND AND QUALIFICATIONS

4. I have over thirty-five years of experience with electronics, electrical engineering, and computer engineering. A copy of my latest curriculum vitae (CV), which I understand was submitted previously as part of my prior declaration in this



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