

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

Hewlett Packard Enterprise Co.,
Petitioner,

v.

Intellectual Ventures II LLC,
Patent Owner.

Patent No. 7,464,240 to Caulkins et al.

Issued: December 9, 2008

Filed: May 23, 2006

Title: Hybrid Solid State Disk Drive With Controller

IPR Case No.: IPR2022-00115

DECLARATION OF VIVEK SUBRAMANIAN, PH.D.

TABLE OF CONTENTS

TABLE OF EXHIBITS	4
I. INTRODUCTION	6
II. QUALIFICATIONS	7
A. Educational Background	8
B. Professional Experience	8
C. Prior Expert Testimony	10
D. Patents and Publications	11
E. Other Relevant Qualifications	11
III. LEGAL STANDARDS	12
A. Anticipation	13
B. Obviousness	13
IV. LEVEL OF ORDINARY SKILL IN THE ART	17
V. KNOWLEDGE OF A POSITA	19
A. Data Storage Devices	19
B. Caching	23
C. Destaging in Write Back Caches	25
VI. OVERVIEW OF THE '240 PATENT	28
A. Priority Date	28
B. The '240 Patent Specification	28
1. Disclosed Solid State Device	28
2. Read and Write Operations	30
3. Destaging Operation	32
C. The Challenged Claims	34
1. Claim 1	35
2. Claim 3	36
3. Claim 7	36
4. Claim 8	36

Declaration of Vivek Subramanian, Ph.D.

IPR2022-00115

U.S. Patent No. 7,464,240

D.	The '240 Patent Prosecution History	36
VII.	CLAIM CONSTRUCTION	38
VIII.	OVERVIEW OF PRIOR ART	39
A.	Harari (Ex. 1004).....	39
B.	Tobita (Ex. 1005)	42
C.	Hu (Ex. 1006).....	46
IX.	ANALYSIS.....	48
A.	GROUND 1 AND 2: Harari anticipates Claims 1, 3, and 7 and/or renders Claims 1, 3, and 7 obvious in view of the knowledge of a POSITA	48
1.	Challenged Claims:.....	49
B.	GROUND 3: Harari in view of Hu and the knowledge of a POSITA render obvious the Challenged Claims	66
1.	Scope and Content of the Prior Art and Motivation to Combine	66
2.	Challenged Claims:.....	70
C.	GROUND 4 & 5: Tobita anticipates Claims 1, 3, and 7 and/or renders Claims 1, 3, and 7 obvious in view of the knowledge of a POSITA	74
1.	Challenged Claims:.....	75
D.	GROUND 6: Tobita in view of Hu and the knowledge of a POSITA renders obvious the Challenged Claim	93
1.	Scope and Content of the Prior Art and Motivation to Combine	94
2.	Challenged Claims:.....	97
X.	CONCLUSION.....	102
XI.	DECLARATION IN LIEU OF OATH	102

Declaration of Vivek Subramanian, Ph.D.

IPR2022-00115

U.S. Patent No. 7,464,240

TABLE OF EXHIBITS

Exhibit	Description
1001	U.S. Patent No. 7,464,240 (“the ’240 Patent”)
1002	Certified File History of the ’240 Patent
1003	Declaration of Vivek Subramanian, Ph.D.
1004	U.S. Patent No. 6,523,132 to Harari et al. (“Harari”)
1005	U.S. Patent No. 5,862,083 to Tobita et al. (“Tobita”)
1006	Hu, Yiming, Tycho Nightingale, and Qing Yang. “RAPID-Cache—A Reliable and Inexpensive Write Cache for High Performance Storage Systems.” <i>IEEE Transactions on Parallel and Distributed Systems</i> , vol. 13, no. 3 (March 2002): 290-307. (“Hu”)
1007	U.S. Patent No. 7,574,556 to Gill et al.
1008	U.S. Patent No. 7,464,221 to Nakamura et al.
1009	U.S. Patent No. 7,058,850 to Cochran
1010	Menon, Jai, and Jim Cortney. “The Architecture of a Fault-Tolerant Cached RAID Controller.” In <i>Proceedings of the 20th Annual International Symposium on Computer Architecture</i> (pp. 76-87). Los Alamitos, CA: Computer Society Press, 1993.
1011	Nam, Young Jin, and Chanik Park. “An Adaptive High-Low Water Mark Destage Algorithm for Cached RAID5.” In <i>Proceedings of the 2002 Pacific Rim International Symposium on Dependable Computing</i> (pp. 177-184). PRDC ’02. Los Alamitos, CA: IEEE Computer Society Press, 2002.
1012	Varma, Anujan, and Quinn Jacobson. “Destage Algorithms for Disk Arrays with Non-Volatile Caches.” In <i>Proceedings of the 22nd Annual International Symposium on Computer Architecture</i>

Declaration of Vivek Subramanian, Ph.D.

IPR2022-00115

U.S. Patent No. 7,464,240

Exhibit	Description
	(pp. 83-95). New York: Association for Computing Machinery, 1995.
1013	Declaration of Sylvia Hall-Ellis, Ph.D.
1014	October 28, 2021 letter to Patent Owner's counsel stipulating to non-use of IPR grounds prior art in the WDTX Proceeding



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