
UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

APPLE INC., HTC CORPORATION, HTC AMERICA, INC., SAMSUNG
ELECTRONICS CO. LTD, SAMSUNG ELECTRONICS AMERICA, INC.,
SAMSUNG TELECOMMUNICATIONS AMERICA, LLC AND
AMAZON.COM, INC.,
Petitioners

v.

MEMORY INTEGRITY, LLC
Patent Owner

U.S. Patent No. 7,296,121

Inter Partes Review Case No. 2015-00161

**MEMORY INTEGRITY, LLC'S PATENT OWNER
PRELIMINARY RESPONSE PURSUANT TO 37 CFR § 42.107(a)**

TABLE OF CONTENTS

I. INTRODUCTION1

II. TECHNOLOGY BACKGROUND.....1

III. SUMMARY OF PETITIONERS’ PROPOSED GROUND FOR REVIEW3

IV. THE PENDING PETITIONS FOR *INTER PARTES* REVIEW OF THE ’121 PATENT PRESENT REDUNDANT GROUNDS3

 A. The Five Pending Petitions for *Inter Partes* Review of the ’121 Patent Contain Grounds Redundant Across the Pending Petitions.....3

V. MEMORY INTEGRITY, LLC’S CLAIM CONSTRUCTIONS10

 A. “probe filtering unit” (claims 1, 16, 25)11

 B. “states associated with selected ones of the cache memories” (claims 1, 16, 25)13

 1. The claimed “states” refers to cache coherence protocol states ...14

 2. A cache coherence protocol state is the current state of a data block in a protocol used to maintain the coherency of caches, in which a data block can only be in one current state at a time, and in which the current state can transition to a different state upon one or more triggering events or conditions17

 3. “states associated with selected ones of cache memories” refers to the cache coherence protocol state(s) of data block(s) which are *stored* in the selected cache memories22

VI. THERE IS NO REASONABLE LIKELIHOOD OF PETITIONERS PREVAILING AS TO A CHALLENGED CLAIM OF THE ’121 PATENT24

 A. Petitioners Failed to Demonstrate That Chaiken Anticipates Claims 1-3, 8, 11, 14-16, 19, 20, 22, and 2524

1.	Petitioners Fail to Demonstrate That Chaiken Anticipates Any Independent Claim Because Chaiken Does Not Disclose “Probes”	24
2.	Petitioners Fail to Demonstrate That Chaiken Anticipates Any Independent Claim Because Chaiken Does Not Disclose a Probe Filtering Unit that “Receive[s] Probes” and “Transmit[s] the Probes”	26
3.	Petitioners Fail to Demonstrate That Chaiken Anticipates Any Independent Claim Because Chaiken Does Not Disclose “probe filtering information” “representative of states associated with selected ones of the cache memories”	29
a.	Mere “presence or absence,” by itself, does not constitute a cache coherence protocol state	30
4.	Petitioners Fail to Demonstrate That Chaiken Anticipates Dependent Claim 2 Because Chaiken Does Not Disclose a “Probe Filtering Unit... Interconnected with the Plurality of Processing Nodes Via the First Point-to-Point Architecture”	33
5.	Petitioners Fail to Demonstrate That Chaiken Anticipates Dependent Claim 11 Because Chaiken Does Not Disclose That “Each Of The Processing Nodes Is Programmed To Complete A Memory Transaction After Receiving A First Number Of Responses”	35
6.	Petitioners Fail to Demonstrate That Chaiken Anticipates Dependent Claim 14 Because Chaiken Does Not Disclose a “Probe Filtering Unit... operable to modify the probes such that the selected processing nodes transmit responses to the probes to the probe filtering unit”	38
B.	Petitioners Failed To Demonstrate That Claim 9 Is Obvious Over Chaiken In View of Duato.....	39
1.	The Petition Fails To Demonstrate That The Combination Of Chaiken And Duato Teaches The “Routing Table” As Recited in Dependent Claim 9.....	39

2. Petitioners Failed To Show That A Person Of Ordinary Skill
In The Art Would Have Been Motivated To Combine The
Teachings Of Chaiken And Duato40

C. Petitioners Failed To Demonstrate That Claims 17-24 Are Obvious
Over Chaiken In View of Smith.....43

VII. CONCLUSION43

EXHIBIT LIST

Exhibit No.	Description
Memory Integrity-2001	Plaintiff Memory Integrity, LLC's Initial Identification of Asserted Claims And Accused Products, served on Petitioners in <i>Memory Integrity LLC v. Amazon.com Inc., et al.</i> , Nos. 1:13-cv-01795, -01796, -01802, -01808 (D. Del. served Oct. 13, 2014)
Memory Integrity-2002	Excerpts from D. E. Culler, J. P. Singh, and A. Gupta PARALLEL COMPUTER ARCHITECTURE, pp. 279-280 (1999)
Memory Integrity-2003	Sorin <i>et al.</i> , "Specifying and Verifying a Broadcast and a Multicast Snooping Cache Coherence Protocol," IEEE TRANSACTIONS ON PARALLEL AND DISTRIBUTED SYSTEMS, Vol. 13, No. 6, pp. 1-23(June 2002)
Memory Integrity-2004	Excerpts from Merriam-Webster's Collegiate Dictionary (10 th ed. 1999)
Memory Integrity-2005	Excerpts from David A. Patterson, <i>et al.</i> , COMPUTER ORGANIZATION AND DESIGN (3d ed. 2005)

Explore Litigation Insights

Docket Alarm provides insights to develop a more informed litigation strategy and the peace of mind of knowing you're on top of things.

Real-Time Litigation Alerts



Keep your litigation team up-to-date with **real-time alerts** and advanced team management tools built for the enterprise, all while greatly reducing PACER spend.

Our comprehensive service means we can handle Federal, State, and Administrative courts across the country.

Advanced Docket Research



With over 230 million records, Docket Alarm's cloud-native docket research platform finds what other services can't. Coverage includes Federal, State, plus PTAB, TTAB, ITC and NLRB decisions, all in one place.

Identify arguments that have been successful in the past with full text, pinpoint searching. Link to case law cited within any court document via Fastcase.

Analytics At Your Fingertips



Learn what happened the last time a particular judge, opposing counsel or company faced cases similar to yours.

Advanced out-of-the-box PTAB and TTAB analytics are always at your fingertips.

API

Docket Alarm offers a powerful API (application programming interface) to developers that want to integrate case filings into their apps.

LAW FIRMS

Build custom dashboards for your attorneys and clients with live data direct from the court.

Automate many repetitive legal tasks like conflict checks, document management, and marketing.

FINANCIAL INSTITUTIONS

Litigation and bankruptcy checks for companies and debtors.

E-DISCOVERY AND LEGAL VENDORS

Sync your system to PACER to automate legal marketing.