

UNITED STATES PATENT AND TRADEMARK OFFICE

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BEFORE THE PATENT TRIAL AND APPEAL BOARD

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

v.

MEMORY INTEGRITY, LLC,  
Patent Owner.

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Case IPR2015-00163  
Patent 7,296,121

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**PETITIONERS' REPLY TO PATENT OWNER RESPONSE  
PURSUANT TO 37 C.F.R. § 42.23**

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## EXHIBITS

- APPL-1001 U.S. Patent Number 7,296,121 to Morton et al. (“the ‘121 Patent”)
- APPL-1002 Excerpts from the Prosecution History of the ‘121 Patent (“the Prosecution History”)
- APPL-1003 U.S. Patent Application Publication Number 2002/0053004 to Pong (“Pong”)
- APPL-1004 David Chaiken *et al.*, “Directory-Based Cache Coherence in Large-Scale Multiprocessors,” *Computer* vol. 24, issue 9 (Jun 1990) (“Chaiken”)
- APPL-1005 Daniel Lenoski *et al.*, “The Directory-Based Cache Coherence Protocol for the DASH Multiprocessor,” *ISCA ‘90 Proceedings of the 17th annual international symposium on Computer Architecture*, pp. 148-159 (May 1990) (“Stanford DASH”)
- APPL-1006 U.S. Patent Number 6,490,661 to Keller *et al* (“Keller”)
- APPL-1007 Excerpts from Jose Duato *et al.*, INTERCONNECTION NETWORKS – AN ENGINEERING APPROACH (1997) (“Duato”)
- APPL-1008 Michael John Sebastian Smith, APPLICATION-SPECIFIC INTEGRATED CIRCUITS (1997) (“Smith”)
- APPL-1009 U.S. Patent No. 7,698,509 to Koster *et al.* (“Koster”)
- APPL-1010 U.S. Patent No. 7,315,919 to O’Krafka *et al.* (“O’Krafka”)
- APPL-1011 U.S. Patent No. 6,338,122 to Baumgartner *et al.* (“Baumgartner”)

- APPL-1012 Anant Agarwal *et al.*, "An Evaluation of Directory Schemes for Cache Coherence," *Conference Proceedings of 15th Annual International Symposium on Computer Architecture* (1988)
- APPL-1013 Louis G. Johnson, "Multiprocessors," ECEN 6253 Lecture Notes (April 28, 2003)
- APPL-1014 Declaration of Dr. Robert Horst
- APPL-1015 Excerpts from Merriam-Webster's Collegiate Dictionary - 10th Ed. (2001)
- APPL-1016 Redacted Letter of March 28, 2014 from Memory Integrity's Counsel to Samsung's Counsel in *Memory Integrity LLC v. Samsung Electronics Co., Ltd. et al.*, Case No. 1:13-cv-01808-GMS, including "Response to Samsung's Allegation of a Rule 11 Violation"
- APPL-1017 Luca Benini and Giovanni De Micheli, "Networks on chips: a new SoC paradigm," *Computer* vol. 35, issue 1 (Jan. 2002) ("Benini")
- APPL-1018 "HyperTransport™ Technology I/O Link - A High-Bandwidth I/O Architecture" (Jul. 20, 2001) ("HyperTransport")
- APPL-1019 U.S. Publication No. 2005/0228952 to Mayhew *et al.* ("Mayhew")
- APPL-1020 U.S. Patent No. 6,662,277 to Gaither ("Gaither")
- APPL-1021 U.S. Patent Application Serial No. 10/966,161, as filed
- APPL-1022 U.S. Patent Application Serial No. 10/288,347, as filed
- APPL-1023 U.S. Patent No. 7,003,633 to Glasco ("Glasco")
- APPL-1024 Affidavit of Mr. Michael Rueckheim in Support of Petitioner Apple Inc.'s Motion for *Pro Hac Vice* Admission

- APPL-1025 Reply Declaration of Dr. Robert Horst
- APPL-1026 Deposition Transcript of Dr. Vojin G. Oklobdzija Vol. 1, November 23, 2015
- APPL-1027 Deposition Transcript of Dr. Vojin G. Oklobdzija Vol. 2, November 23, 2015
- APPL-1028 David E. Culler et al., Parallel Computer Architecture: A Hardware/software Approach (1st Ed.) (1998)
- APPL-1029 "InfiniBand Architecture Specification Volume 1 Release 1.0.a" (June 19, 2001)
- APPL-1030 James Laudon and Daniel Lenoski, Proceedings of the 24th Annual International Symposium on Computer Architecture, "The SGI Origin: A ccNUMA Highly Scalable Server" (1997)

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