UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

APPLE INC., Petitioner,

v.

QUALCOMM INCORPORATED, Patent Owner.

> Case IPR2018-01316 Patent 8,063,674

PETITIONERS' REPLY TO PATENT OWNER RESPONSE

PURSUANT TO 37 C.F.R. § 42.23

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EXHIBITS

APPLE-1001	U.S. Patent No. 8,063,674 to Kwon et al. ("the '674 patent")
APPLE-1002	Excerpts from the Prosecution History of the '674 Patent ("the Prosecution History")
APPLE-1003	Declaration of Dr. Robert Horst
APPLE-1004	Curriculum Vitae of Dr. Robert Horst
APPLE-1005	U.S. Patent No. 7,279,943 to Steinacker ("Steinacker")
APPLE-1006	U.S. Patent No. 4,717,836 to Doyle ("Doyle")
APPLE-1007	Jun Cheol Park and Vincent J. Mooney, <i>Sleepy Stack Leakage Reduction</i> , 14 IEEE Transactions On Very Large Scale Integration (VLSI) Systems 1251 (2006) ("Park")
APPLE-1008	U.S. Pat. Appl. Pub. No. 2002/0163364 to Majcherczak <i>et al.</i> ("Majcherczak")
APPLE-1009	U.S. Patent No. 6,646,844 to Matthews ("Matthews")
APPLE-1010	G. W. Griffiths, "A Review of Semiconductor Packaging and Its Role in Electronics Manufacturing," 8th IEEE/CHMT International Conference on Electronic Manufacturing Technology Symposium (1990)
APPLE-1011	Wang-Chang Albert Gu, "RF Front-End Modules in Cellular Handsets," 2004 IEEE Compound Semiconductor Integrated Circuit Symposium (2005)
APPLE-1012	Kaushik Roy <i>et al.</i> , "Leakage current mechanisms and leakage reduction techniques in deep-submicrometer CMOS circuits," 91 Proceedings of the IEEE 2, pp. 305-327 (Apr. 2003) ("Roy")

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- APPLE-1013 Yangyang Ye *et al.*, "A new technique for standby leakage reduction in high-performance circuits," 1998 Symposium on VLSI Circuits. Digest of Technical Papers (Cat. No.98CH36215), Honolulu, HI, USA, 1998, pp. 40-41 ("Borkar")
- APPLE-1014 U.S. Patent No. 7,049,865 to Parker et al. ("Parker")
- APPLE-1015 Qadeer A. Khan *et al.*, "A Sequence Independent Power-on-Reset Circuit for Multi-Voltage Systems," 2006 IEEE International Symposium on Circuits and Systems (Sep. 2006)
- APPLE-1016 Declaration of Jacob Munford (with attachments)
- APPLE-1017 Transcript of Deposition of Dr. Massoud Pedram
- APPLE-1018 Supplemental Declaration of Dr. Robert Horst
- APPLE-1019 U. Daya Perera, *Reliability of Mobile Phones*, 1995 IEEE Proceedings Annual Reliability and Maintainability Symposium (Jan. 1995)
- APPLE-1020 One World Technologies, Inc. v. The Chamberlain Group, Inc., IPR2017-00126, Paper 56 (Final Written Decision) (PTAB Oct. 24, 2018)
- APPLE-1021 One World Technologies, Inc. v. The Chamberlain Group, Inc., IPR2017-00126, Paper 67 (Denial of Rehearing Request), 14-21 (PTAB Apr. 4, 2019)
- APPLE-1022 U.S. Patent No. 5,386,153 to Peer H. Voss et al. ("Voss")
- APPLE-1023 Wikipedia Entry for "LTspice" available at https://en.wikipedia.org/wiki/LTspice (accessed on July 17, 2019)
- APPLE-1024 John F. Wakerly, DIGITAL DESIGN PRINCIPLES AND PRACTICES 4th Ed. (2006)

APPLE-1025 Bruce Jacob, *ENEE 359a Digital VLSI Design - Transistor Sizing & Logical Effort*, available at https://ece.umd.edu/courses/enee359a.S2007/ (Internet Archive cached version of this address demonstrating presentation was available at least as early as July 4, 2008)

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