

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

INTEL CORPORATION,
Petitioner

v.

QUALCOMM INCORPORATED,
Patent Owner

Patent No. 8,838,949

Case IPR2018-01334

PATENT OWNER'S RESPONSE BRIEF ON REMAND¹

¹ IPR2018-01335 and IPR2018-01336 have been consolidated with IPR2018-01334, and Patent Owner will file this brief only in IPR2018-01334. All citations are to IPR2018-01334 unless otherwise noted.

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LIST OF PATENT OWNER EXHIBITS

- Ex. 2001 Transcript of the Deposition of Dr. Bill Lin
- Ex. 2002 U.S. Provisional Patent Application No. 61/324,122
- Ex. 2003 Qualcomm v. Apple, Case No. 3:17-CV-1375-DMS-MDD, S.D. Cal.,
Transcript of Jury Trial, Day 2, Volume 2-A
- Ex. 2004 Qualcomm v. Apple, Case No. 3:17-CV-1375-DMS-MDD, S.D. Cal.,
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- Ex. 2007 Declaration of Dr. Martin Rinard
- Ex. 2008 Transcript of Second Deposition of Dr. Bill Lin
- Ex. 2009 Patent Owner's Demonstratives
- Ex. 2010 Lin Deposition Transcript (May 5, 2022)
- Ex. 2011 Oxford University Press, "A Dictionary of Computing" (6th ed.)
- Ex. 2012 "Computer Architecture—A Quantitative Approach" by John L.
Hennessy and David A. Patterson (5th ed.)
- Ex. 2013 FIFO Architecture, Functions, and Applications (Texas Instruments,
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- Ex. 2014 "Computer Architecture—A Quantitative Approach" by John L.
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- Ex. 2015 Remand Declaration of Dr. Martin Rinard

I. INTRODUCTION

The primary issue before the Board on remand is the meaning of the claim term “hardware buffer.” Claims 1-9 of the ’949 patent are directed to a multi-processor system including “system memory and a hardware buffer for receiving an image header and at least one data segment of an executable software image.” The claimed multi-processor system also includes a scatter loader controller configured “to scatter load each received data segment ... directly from the hardware buffer to the system memory.” Dependent claim 2 further recites that “the scatter loader controller is configured to load the executable software image directly from the hardware buffer to the system memory of the secondary processor without copying data between system memory locations on the secondary processor.”

Analyzing this claim language, the Federal Circuit determined that “the meaning of ‘hardware buffer’ relates to the ability to move the software image ‘directly’ to the second processor’s system memory and to avoid ‘copying data between system memory locations.’” *Intel Corp. v. Qualcomm Inc.*, 21 F.4th 801, 810 (Fed. Cir. 2021) (hereinafter, the “Opinion”). The court further found that “because claim 1 requires both a ‘system memory’ and a ‘hardware buffer,’ there must be some distinction between those two concepts.” *Id.*

The Federal Circuit determined, however, that these “conclusions from the claim language advance the claim-construction inquiry only so far.” *Id.* “What is

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