

UNITED STATES PATENT AND TRADEMARK OFFICE

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BEFORE THE PATENT TRIAL AND APPEAL BOARD

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INTEL CORPORATION,  
Petitioner

v.

QUALCOMM INCORPORATED,  
Patent Owner

Patent No. 8,838,949

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Case IPR2018-01334

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**PATENT OWNER'S SUR-REPLY ON REMAND<sup>1</sup>**

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<sup>1</sup> 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.,  
Transcript of Jury Trial, Day 2, Volume 2-B
- Ex. 2005 Qualcomm v. Apple, Case No. 3:17-CV-1375-DMS-MDD, S.D. Cal.,  
Transcript of Jury Trial, Day 6, Volume 6-B
- Ex. 2006 Qualcomm v. Apple, Case No. 3:17-CV-1375-DMS-MDD, S.D. Cal.,  
Transcript of Jury Trial, Day 7, Volume 7-A
- 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,  
1999)
- Ex. 2014 "Computer Architecture—A Quantitative Approach" by John L.  
Hennessy and David A. Patterson (4th ed.)
- Ex. 2015 Remand Declaration of Dr. Martin Rinard

The Board should confirm the patentability of the challenged claims, as explained in Qualcomm’s Response on Remand (Paper 37, “PO Resp. Br.”) and here.

## **I. INTEL’S CONSTRUCTION AND ARGUMENTS CONTRADICT THE INTRINSIC RECORD AND FEDERAL CIRCUIT OPINION**

The intrinsic record supports Qualcomm’s construction. PO Resp. Br. at 3-8. Intel’s construction and arguments are inconsistent with that record. Indeed, the Federal Circuit opinion directly addressed the ’949 patent specification and claims, providing significant guidance for this remand. *Intel Corp. v. Qualcomm Inc.*, 21 F.4th 801, 811 (Fed. Cir. 2021) (hereinafter, the “Opinion”). Yet, Intel’s Reply largely disregards the Federal Circuit’s opinion, or even argues contrary to it.

### **A. The Federal Circuit Did Not Reject The Board’s Construction**

Intel misreads the Opinion in saying it “rejected” the Board’s construction. Pet. Reply at 1. The Court did not dispute the substance of the Board’s construction. Rather, it found the Board “failed to tie its construction ... to the actual invention described in the specification”; “[w]hat is needed, then, is an analysis of the specification ....” Opinion at 804, 810. The Court made clear it was not “suggesting how, *if at all*, a proper construction will be substantively different” from the Board’s negative construction excluding temporary buffers. *Id.* at 810 (emphasis added).

The Federal Circuit said that an analysis of the specification “seems likely to support an affirmative construction in place of the Board’s purely negative one.” Opinion at 812. To that end, Qualcomm has provided the analysis mandated by the

Opinion (PO Resp. Br. at 3-13), yielding a positive construction consistent with the Federal Circuit's guidance. Intel, by contrast, disregards the Board's previous analysis and proposes a new construction significantly different from anything considered before remand. This is wrong and unnecessary. The Court did not dispute the substance of the Board's construction, and hence there is no reason to wipe the slate clean. The Board should bolster its analysis of the specification (as instructed by the Court) and affirm the patentability of claims 1-9 and 12 for reasons similar to those already provided in the Final Written Decision.

**B. Intel's Argument That The Hardware Buffer Can Be Implemented In System Memory Is Contrary To The Opinion**

Intel argues that the "hardware buffer" can be implemented in system memory. *See, e.g.*, Pet. Reply at 2. This, too, is inconsistent with the Federal Circuit's Opinion. The Opinion states that "there must be some distinction between [the] two concepts" of "hardware buffer" and "system memory." Opinion at 810. The Opinion also highlights "the distinctions between 'system memory' and 'hardware buffer' that are drawn both in the claim language and in the specification." *Id.* at 811. Intel's position cannot be reconciled with the Federal Circuit's findings.

Intel argues that "since the 'hardware buffer' must be physically separate from the *claimed* 'system memory'" under its construction, there is no inconsistency with the Opinion. Pet. Reply at 5 (emphasis added). But the Court never suggested that physical separation from the *claimed* system memory is sufficient to constitute a

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