

DOCKET NO.: 0107131.00568US3

Filed on behalf of Intel Corporation

By:

David L. Cavanaugh, Reg. No. 36,476

(David.Cavanaugh@wilmerhale.com)

Thomas E. Anderson, Reg. No. 37,063

(Tom.Anderson@wilmerhale.com)

Joseph H. Haag, Reg. No. 42,612

(Joseph.Haag@wilmerhale.com)

Evelyn C. Mak, Reg., No. 50,492

(Evelyn.Mak@wilmerhale.com)

Wilmer Cutler Pickering Hale and Dorr LLP

1875 Pennsylvania Avenue, N.W.

Washington, DC 20006

TEL: (202) 663-6000

**UNITED STATES PATENT AND TRADEMARK OFFICE**

---

**BEFORE THE PATENT TRIAL AND APPEAL BOARD**

---

Intel Corporation  
Petitioner

v.

Patent Owner of  
U.S. Patent No. 8,838,949 to Gupta *et al.*

Trial No. IPR2018-001336

**PETITION FOR *INTER PARTES* REVIEW OF  
U.S. PATENT NO. 8,838,949  
UNDER 35 U.S.C. § 312 AND 37 C.F.R. § 42.104**

## TABLE OF CONTENTS

|       |  |    |
|-------|--|----|
| I.    | INTRODUCTION .....   | 1  |
| II.   | MANDATORY NOTICES .....  | 2  |
|       | A. Real Party-in-Interest .....                                    | 2  |
|       | B. Related Matters .....   | 2  |
|       | C. Counsel.....  | 3  |
|       | D. Service Information.....  | 3  |
| III.  | CERTIFICATION OF GROUNDS FOR STANDING.....                         | 3  |
| IV.   | OVERVIEW OF CHALLENGE AND RELIEF REQUESTED.....                    | 3  |
|       | A. Prior Art Patents and Printed Publications.....                 | 4  |
|       | B. Grounds for Challenge .....                                     | 5  |
| V.    | TECHNOLOGY BACKGROUND.....   | 5  |
|       | A. Multi-Processor Systems.....                                    | 5  |
|       | 1. Processor-To-Processor Communications.....                      | 5  |
|       | 2. Processor Software Code .....                                   | 6  |
|       | 3. Characteristics of Memory.....                                  | 6  |
|       | B. Storing, Loading, and Executing Processor Software<br>Code..... | 7  |
|       | 1. Storing the Software Code in Memory .....                       | 7  |
|       | 2. Loading and Executing Multi-Segmented Software<br>Images .....  | 7  |
|       | 3. Sharing Memory in Multi-Processor Systems.....                  | 8  |
|       | C. Boot Loading.....   | 8  |
| VI.   | OVERVIEW OF THE '949 PATENT .....                                  | 9  |
|       | A. Alleged Problem of the Prior Art.....                           | 10 |
|       | B. Purported Solution of the '949 Patent.....                      | 11 |
|       | C. Prosecution History of the '949 Patent .....                    | 13 |
| VII.  | LEVEL OF ORDINARY SKILL IN THE ART .....                           | 16 |
| VIII. | CLAIM CONSTRUCTION .....   | 17 |

|     |   |    |
|-----|---|----|
| A.  | “image header” (claims 18 and 20).....  | 17 |
| IX. | OVERVIEW OF PRINCIPAL PRIOR ART REFERENCES.....   | 18 |
| A.  | Svensson (Ex-1210) .....  | 18 |
| B.  | Bauer (Ex-1209).....  | 20 |
| C.  | Kim (Ex-1211) (Including English Translation (Ex-1212)) .....   | 21 |
| D.  | Lim (Ex-1214).....  | 23 |
| X.  | SPECIFIC GROUNDS FOR PETITION.....  | 26 |
| A.  | Ground 1: Claims 18-21 Are Rendered Obvious By The Combination Of Bauer, Svensson, Kim, And Lim ..... | 26 |
| 1.  | Reference to “Bauer and Svensson Combined” .....  | 26 |
| 2.  | Claim 18.....   | 28 |
| 3.  | Claim 19.....   | 66 |
| 4.  | Claim 20.....   | 68 |
| 5.  | Claim 21 .....  | 74 |
| XI. | CONCLUSION .....  | 75 |

Petitioner Intel Corporation respectfully requests *Inter Partes* Review of claims 18-21 of U.S. Patent No. 8,838,949 (the “’949 patent”) (Ex-1201) pursuant to 35 U.S.C. §§ 311-319 and 37 C.F.R. § 42.1 *et seq.*

## I. INTRODUCTION

The ’949 patent discloses a particular technique for “scatter loading” an executable software image from a primary processor to a secondary processor in a multi-processor system. The general concept of scatter loading a software image and the specific details proposed by the ’949 patent, however, were neither novel nor non-obvious at the time of the purported invention. This Petition presents two key pieces of prior art—Bauer and Kim—that were not before the Patent Office during prosecution and that disclose exactly what the Examiner found missing from the prior art of record.

The Patent Owner obtained the ’949 patent only by adding claim limitations to distinguish a prior art Svensson PCT reference. The Patent Owner argued that Svensson PCT did not disclose a secondary processor that (1) received separately an image header and data segments of a software image; and (2) scatter loaded each data segment directly from the secondary processor’s hardware buffer to its system memory based on the image header. This Petition explains how Bauer and Kim disclose these two alleged points of novelty of the ’949 patent.

These new references—in combination with Svensson, the U.S. counterpart to Svensson PCT—present new art and a new combination that the Examiner never had a chance to consider. As explained below and in the accompanying declaration of Professor Bill Lin, this new art shows that the challenged claims of the '949 patent were obvious at the time of the purported invention and should be canceled.

## II. MANDATORY NOTICES

### A. Real Party-in-Interest

Intel Corporation (“Petitioner”) is a real party-in-interest and submits this *inter partes* review petition (“Petition”) for review of certain claims of the '949 patent. Petitioner also identifies Apple Inc. (“Apple”) as a real party-in-interest.

### B. Related Matters

The following litigation matter would affect or be affected by a decision in this proceeding: *Qualcomm Inc. v. Apple Inc.*, Case No. 3:17-cv-1375 (S.D. Cal.).

The '949 patent was asserted in, but subsequently withdrawn from, this proceeding: *In re Certain Mobile Elec. Devices and Radio Frequency and Processing Components Thereof*, Inv. No. 337-TA-1065 (Int'l Trade Comm'n) (“Related ITC Case”).

Petitioner is also concurrently filing (1) a Petition for *Inter Partes* Review of claims 1-9 and 22-23 of the '949 patent (IPR2018-01334) and (2) a Petition for

# 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.