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UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

Intel Corporation
Petitioner

v.

Qualcomm Incorporated
Patent Owner

Case IPR2018-01152

**PETITION FOR *INTER PARTES* REVIEW OF
U.S. PATENT NO. 8,698,558
CHALLENGING CLAIMS 12-14**

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Petitioner Intel Corporation (“Intel”) respectfully requests *Inter Partes* Review of claims 12-14 of U.S. Patent No. 8,698,558 (the “’558 patent”) (Ex. 1001) pursuant to 35 U.S.C. §§ 311-19 and 37 C.F.R. § 42.1 *et seq.*

I. INTRODUCTION

The ’558 patent claims various structures for “efficiently generating a power supply for a power amplifier.” Ex. 1001, 1:30-31. Power supply generators for power amplifiers, however, were well-known at the time of the claimed invention, and the challenged claims either are not novel or are obvious variations of known power supply generators. The aspects of the ’558 patent that are identified by the patent as inventive and that the Patent Owner *itself* has identified as inventive in parallel litigation (*i.e.*, the addition of a boost converter to an envelope amplifier and the use of an “offset” current to generate a larger supply current) were known in the prior art at the time of the claimed invention, and they provide only known and predictable results that cannot justify a patent.

Moreover, the primary prior art references, Chu and Kwak, relied upon in this and related petitions—neither of which was before the Patent Office during prosecution—disclose the key elements that the Examiner found to be allegedly missing from the prior art during prosecution. For example, the Examiner allowed claims 12-14 because he found that the prior art of record did not disclose the

required operational amplifier, driver, and PMOS and NMOS transistors. The Chu reference cited in this Petition discloses those limitations.

Accordingly, the prior art cited in this Petition anticipates and/or renders obvious claims 12-14 of the '558 patent.

II. MANDATORY NOTICES

A. Real Party-in-Interest

Intel Corporation (“Petitioner”) is a real party-in-interest and submits this *inter partes* review Petition for review of certain claims of U.S. Patent No. 8,698,558 (the “’558 patent”). Petitioner also identifies Apple Inc. (“Apple”) as a real party-in-interest.

B. Related Matters

Qualcomm Incorporated (“Qualcomm” or “Patent Owner”) has asserted the '558 patent against Apple in *Certain Mobile Electronic Devices and Radio Frequency and Processing Components Thereof*, Investigation No. 337-ITC-1065, currently pending before the International Trade Commission. Qualcomm also has asserted the '558 patent against Apple in *Qualcomm Inc. v. Apple Inc.*, No. 3:17-cv-1375 (S.D. Cal.).

Concurrently with this *inter partes* review Petition, Petitioner is also filing *inter partes* review petitions for claims 1-9 of the '558 patent (IPR2018-01153), claims 15-20 of the '558 patent (IPR2018-01154), and claims 10 and 11 of the

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