

DOCKET NO.: 1033300-00287

UNITED STATES PATENT AND TRADEMARK OFFICE

PATENT: 7,916,781
INVENTORS: JIN HUI, AAMOD KHANDEKAR, ROBERT J. McELIECE
FILED: JUNE 30, 2008
ISSUED: MARCH 29, 2011
TITLE: SERIAL CONCATENATION OF INTERLEAVED
CONVOLUTIONAL CODES FORMING TURBO-LIKE
CODES

BEFORE THE PATENT TRIAL AND APPEAL BOARD

Apple Inc.
Petitioner

v.

California Institute of Technology
Patent Owner

Case IPR2017-00297

**PETITION FOR *INTER PARTES* REVIEW OF U.S. PATENT NO. 7,916,781
UNDER 35 U.S.C. § 312 AND 37 C.F.R. § 42.104**

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I. MANDATORY NOTICES

A. Real Party-in-Interest

Apple Inc. (“Apple” or “Petitioner”) and Broadcom Corp. are the real parties-in-interest.

B. Related Matters

U.S. Pat. No. 7,916,781 (the “’781 patent,” Ex. 1001) is assigned to the California Institute of Technology (“Caltech” or “Patent Owner.”) On May 26, 2016, Caltech sued Apple, Broadcom Corp., and Avago Technologies, Ltd. in the U.S. District Court for the Central District of California, claiming that Apple products compliant with the 802.11n and 802.11ac wireless communication standards infringe the ’781 patent (and three others). On August 15, 2016, Caltech amended its complaint to assert patent infringement against Cypress Semiconductor Corp. *See* Amended Complaint, *California Institute of Technology v. Broadcom, Ltd. et al.* (Case 2:16-cv-03714), Docket No. 36. The ’781 patent was also asserted by Caltech against Hughes Communications Inc. in *California Institute of Technology v. Hughes Communs., Inc* (Case 2:13-cv-07245), and its claims were challenged in one petition for *inter partes* review, IPR2015-00059. Patents in the priority chain of the ’781 patent were challenged in IPR2015-00068, IPR 2015-00067, IPR2015-00060, IPR2015-00061, and IPR-2015-00081.

C. Counsel

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II. CERTIFICATION OF GROUNDS FOR STANDING

Petitioner certifies pursuant to Rule 42.104(a) that the patent for which review is sought is available for *inter partes* review and that Petitioner is not barred or estopped from requesting an *inter partes* review challenging the patent claims on the grounds identified in this Petition.

III. OVERVIEW OF CHALLENGE AND RELIEF REQUESTED

Pursuant to Rules 42.22(a)(1) and 42.104(b)(1)-(2), Petitioner challenges claims 3-12 and 19-21 of the '781 Patent ("the challenged claims") and requests that each challenged claim be canceled.¹

A. Prior Art Patents and Printed Publications

Petitioner relies upon the patents and printed publications listed in the Table of Exhibits, including:

¹ Petitioner has filed a second petition challenging claims 13-22 of the '781 patent, which is also dated December 12, 2016.

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