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UNITED STATES PATENT AND TRADEMARK OFFICE

PATENT: 7,116,710
INVENTORS: HUI JIN, AAMOD KHANDEKAR, ROBERT J. MCELIECE
FILED: MAY 18, 2001
ISSUED: OCTOBER 3, 2006
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 IPR2017-00219

**PETITION FOR *INTER PARTES* REVIEW OF U.S. PATENT NO. 7,116,710
UNDER 35 U.S.C. § 312 AND 37 C.F.R. § 42.104**

TABLE OF CONTENTS

I. Mandatory Notices	3
A. Real Party-in-Interest	3
B. Related Matters	3
C. Counsel.....	4
D. Service Information.....	4
II. Certification of Grounds for Standing	4
III. Overview of Challenge and Relief Requested	4
A. Prior Art Patents and Printed Publications.....	4
B. Relief Requested	6
IV. Overview of the Technology.....	6
A. Error-Correcting Codes in General.....	6
B. Coding Rate.....	9
C. Performance of Error-Correcting Codes	10
D. LDPC Codes, Turbocodes, and Repeat-Accumulate Codes.....	11
E. Mathematical Representations of Error-Correcting Codes.....	14
F. Irregularity.....	19
V. The '710 Patent	21
A. Claims	21
B. Summary of the Specification.....	21
C. Level of Ordinary Skill in the Art.....	23
VI. Claim Construction	24
A. “close to one” (Claims 1 and 3).....	24
VII. Overview Of Primary Prior Art References.....	25
A. Divsalar	25
B. Luby	28
C. Luby97	31
D. Pfister	32
VIII. Grounds for Challenge.....	33

U.S. Patent 7,116,710
Petition for *Inter Partes* Review

A. Ground 1: Claims 1-8 and 11-14 Are Obvious Over Divsalar in View of Luby34

B. Ground 2: Claims 15-17, 19-22, and 24-33 Are Obvious Over Divsalar in View of Luby, and Further in View of Luby9755

C. Ground 3: Claim 10 Is Obvious Over Divsalar in View of Luby, and Further in View of Pfister69

D. Ground 4: Claim 23 Is Obvious Over Divsalar, Luby, and Luby97, and Further in View of Pfister70

IX. Conclusion.....72

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. 7,116,710 (the “’710 patent,” Ex. 1201) 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 ’710 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 ’710 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 two petitions for *inter partes* review, IPR2015-00068 and IPR 2015-00067. Patents claiming priority to the ’710 patent were challenged in IPR2015-00060, IPR2015-00061, IPR2015-00081, and IPR2015-00059.

C. Counsel

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D. Service Information

Petitioner consents to electronic service.

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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 *inter partes* review on the grounds 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 1-8, 10-17, and 19-33 of the '710 Patent ("the challenged claims") and requests that each challenged claim be canceled.

A. Prior Art Patents and Printed Publications

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

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