

UNITED STATES PATENT AND TRADEMARK OFFICE

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BEFORE THE PATENT TRIAL AND APPEAL BOARD

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Apple Inc.  
Petitioner

v.

California Institute of Technology  
Patent Owner

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Case Nos. IPR2017-00210, IPR2017-00211, IPR2017-00219, IPR2017-00297,  
IPR2017-00423, IPR2017-00700, IPR2017-00701, IPR2017-00728

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**DECLARATION OF JONATHAN E. BARBEE IN SUPPORT OF  
UNOPPOSED MOTIONS TO SUBMIT REPLACEMENT EXHIBITS  
PURSUANT TO 37 C.F.R. § 42.104(c)**

**Apple vs. Caltech  
IPR2017-00728  
Apple 1226**

1. I, Jonathan E. Barbee, am an attorney and work with the counsel of record for Petitioner Apple Inc. in the captioned *inter partes* review proceedings, Richard Goldenberg. I assisted Mr. Goldenberg in the preparation and filing of the petitions and accompanying exhibits in the captioned *inter partes* review proceedings.

2. This declaration is filed in support of Petitioner's Unopposed Motions to Correct Clerical Errors in the captioned *inter partes* review proceedings. I understand that these motions will be filed to correct exhibits filed with the captioned *inter partes* review proceedings, which are directed to U.S. Patent No. 7,116,710 (the "'710 Patent"), U.S. Patent No. 7,916,781 (the "'781 Patent"), and U.S. Patent No. 7,421,032 (the "'032 Patent") (collectively, the "'710, '781, and '032 IPRs").

3. Petitioner inadvertently filed incorrect versions of the following exhibits in the captioned *inter partes* review proceedings:

- Frey, B. J. and MacKay, D. J. C., "Irregular Turbocodes," *Proc. 37th Allerton Conf. on Comm., Control and Computing*, Monticello, Illinois, 1999 (the "Frey exhibit").
- D. Divsalar, H. Jin, and R. J. McEliece, "Coding theorems for 'turbo-like' codes," *Proc. 36th Allerton Conf. on Comm., Control and Computing*, Allerton, Illinois, 1998 (the "Divsalar exhibit").

- Declaration of Paul H. Siegel (the “Siegel Declaration exhibit”).

4. For each petition in the '710, '781, and '032 IPRs, I assisted Mr. Goldenberg in collecting the exhibits for each petition and directed legal staff to upload the exhibits for each petition. Due to clerical errors, I inadvertently and unintentionally collected incorrect versions of the Frey exhibit and the Divsalar exhibit and omitted the “Exhibit 1” attached to the Siegel Declaration exhibit. Unaware of this oversight, I sent incorrect versions of these exhibits to my firm’s legal staff to be uploaded.

5. For the Frey exhibit, my firm had several copies of the Frey reference in the firm’s document management database, including the inadvertently-filed exhibits. I unintentionally selected the wrong documents because the inadvertently-filed exhibits had been circulated for different purposes. The copy of the Frey reference uploaded in the '710 Patent IPRs (IPR2017-00210, -00211, and -00219) and the '781 Patent IPRs (IPR2017-00297 and -00423) was missing the table of contents, date stamp, and page numbering of the correct Frey exhibit. The copy of the Frey reference uploaded in the '032 Patent IPRs (IPR2017-00700, -00701, and -00728) has a date stamp of September 19, 2000 from the University of Michigan Library and a September 25, 2000 date stamp from the University of Washington instead of the March 20, 2000 date stamp from the Cornell University Library that appears on the correct Frey exhibit. The copy of the Frey reference

that I collected for the '032 Patent IPRs was also missing sequential page numbers beginning with page 1, which were needed to match the citations in the petitions in the '032 Patent IPRs.

6. For the Divsalar exhibit, I inadvertently directed legal staff to upload the Divsalar exhibit without adding sequential page numbers beginning with page 1 below the original page numbers of the exhibit. The addition of the sequential page numbers was required for the Divsalar exhibit to match the citations in the petitions for the '710, '781, and '032 IPRs.

7. For the Siegel Declaration exhibit, the Siegel Declaration and “Exhibit 1” to the declaration were sent by Professor Paul H. Siegel to my firm as attachments in separate emails—I inadvertently overlooked the email attaching “Exhibit 1” while preparing the Siegel Declaration exhibit. Consequently, “Exhibit 1” to the Siegel Declaration was not attached before I directed legal staff to upload the inadvertently-filed exhibit in the '710 Patent IPRs and the '032 Patent IPRs.

8. All statements in this declaration are made under penalty of perjury and are true and correct to the best of my knowledge.

Dated: February 28, 2017

Respectfully Submitted,

*Jonathan E. Barbee*

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