

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 RICHARD GOLDENBERG IN SUPPORT OF  
UNOPPOSED MOTIONS TO SUBMIT REPLACEMENT EXHIBITS  
PURSUANT TO 37 C.F.R. § 42.104(c)**

**Apple vs. Caltech  
IPR2017-00211  
Apple 1125**

1. I, Richard Goldenberg, am employed at WilmerHale and am lead counsel of record for Petitioner Apple Inc. in the above captioned *inter partes* review proceedings. I am an attorney duly admitted to practice before the United States Patent and Trademark Office. I supervised and assisted in preparation of 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. The exhibit numbers for each of the Frey, Divsalar, and Siegel

Declaration exhibits in the '710, '781, and '032 IPRs are listed in the table below.

Petitioner did not file the Siegel Declaration exhibit in the '781 Patent IPRs.

<b>Exhibit Name</b>	<b>IPR Number</b>	<b>Patent Number</b>	<b>Exhibit Number</b>
Frey	IPR2017-00210	7,116,710	1002
Frey	IPR2017-00211	7,116,710	1102
Frey	IPR2017-00219	7,116,710	1202
Frey	IPR2017-00297	7,916,781	1010
Frey	IPR2017-00423	7,916,781	1110
Frey	IPR2017-00700	7,421,032	1010
Frey	IPR2017-00701	7,421,032	1110
Frey	IPR2017-00728	7,421,032	1210
Siegel	IPR2017-00210	7,116,710	1020
Siegel	IPR2017-00211	7,116,710	1120
Siegel	IPR2017-00219	7,116,710	1220
Siegel	IPR2017-00700	7,421,032	1023
Siegel	IPR2017-00701	7,421,032	1123
Siegel	IPR2017-00728	7,421,032	1223
Divsalar	IPR2017-00210	7,116,710	1003

Divsalar	IPR2017-00211	7,116,710	1103
Divsalar	IPR2017-00219	7,116,710	1203
Divsalar	IPR2017-00297	7,916,781	1017
Divsalar	IPR2017-00423	7,916,781	1117
Divsalar	IPR2017-00700	7,421,032	1017
Divsalar	IPR2017-00701	7,421,032	1117
Divsalar	IPR2017-00728	7,421,032	1217

5. During the process of filing petitions in the '710, '781, and '032 IPRs, an associate at my firm, Jonathan E. Barbee, assisted me in the collection and uploading of the exhibits to each petition. In those IPR filings, Mr. Barbee directed legal staff to upload incorrect versions of the Frey exhibit and the Divsalar exhibit and omitted the "Exhibit 1" attached to the Siegel Declaration exhibit.

6. For the Frey exhibit, being aware of the prior result in IPR2015-00067, I intended for a copy of the Frey reference to be filed that included a March 20, 2000 date stamp from the Cornell University Library. During prior litigation with a different defendant, my firm obtained and produced to the Patent Owner over a year ago such a copy of the Frey reference, which bears the Bates Stamp HUGES00883604-83627 and bears a date stamp of March 20, 2000 from the Cornell University Library. My firm had several additional copies of the Frey reference in the firm's document management database, including the

inadvertently-filed exhibits. Mr. Barbee selected the wrong document because the inadvertently-filed versions of the exhibit had been circulated for a different purpose. However, the text of the corrected Frey exhibit is identical to the text of the inadvertently-filed exhibits and will not affect the manner in which Frey teaches the claims as explained in the petitions filed in the '710, '781, and '032 IPRs.

7. For the '710 Patent IPRs (IPR2017-00210, -00211, and -00219) and the '781 Patent IPRs (IPR2017-00297 and -00423), the corrected exhibits contain the following material, which the inadvertently-filed Frey exhibit lacks: a table of contents, a date stamp, and page numbering corresponding to the Table of Contents of the publication in which the Frey reference was published. The Table of Contents from that publication was filed as a separate exhibit with the petitions for the '710 Patent IPRs as Ex. 1015, Ex. 1115, and Ex. 1215 to demonstrate when the Frey reference was available to the public—the Table of Contents in these exhibits bears a date stamp of March 20, 2000 from the Cornell University Library (*i.e.*, the same date stamp present in the corrected Frey exhibit) and indicates that the first page of Frey is page 241. The pagination of the inadvertently-filed Frey exhibit does not match the pagination identified in the Table of Contents in Ex. 1015, Ex. 1115, and Ex. 1215 because the inadvertently-filed Frey exhibit begins at page 1. In the corrected Frey exhibit, the first page of the exhibit is page 241, which



matches the pagination indicated in the Table of Contents of the publication in which the Frey reference was published, as shown in Ex. 1015, Ex. 1115, and Ex. 1215.

8. For the '032 Patent IPRs (IPR2017-00700, -00701, and -00728), the inadvertently-filed Frey exhibit is identical to the corrected exhibit except that the inadvertently-filed exhibit bears a September 19, 2000 date stamp from the University of Michigan Library, and a September 25, 2000 date stamp from the University of Washington whereas the correct Frey exhibit bears a March 20, 2000 date stamp from the Cornell University Library. In addition, the correct exhibit includes sequential page numbers beginning with page 1 to match the citations in the petitions in the '032 Patent IPRs.

9. For the Divsalar exhibit, Petitioner cited to the Divsalar exhibit in the petitions for the '710, '781, and '032 IPRs using sequential page numbering that designated the first page of the reference as page 1, whereas the inadvertently-filed exhibit begins with page 201. Mr. Barbee 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 needed for the Divsalar exhibit to match the citations in the petitions for the '710, '781, and '032 IPRs. The corrected Divsalar exhibit is identical to the inadvertently-filed exhibit except for the addition of the sequential

page numbers and will not affect the substance of the petitions filed in the '710, '781, and '032 IPRs.

10. For the Siegel Declaration exhibit, "Exhibit 1" to the Siegel Declaration was not attached before Mr. Barbee directed legal staff to upload the inadvertently-filed exhibit in the '710 Patent IPRs and '032 Patent IPRs. The Siegel Declaration and "Exhibit 1" to the declaration were sent by Professor Paul H. Siegel to my firm as attachments in separate emails. Mr. Barbee overlooked the separate email attaching "Exhibit 1" while preparing the Siegel Declaration for filing. The corrected Siegel Declaration exhibit is identical to the inadvertently-filed exhibit except for the addition of "Exhibit 1" and will not affect the substance of the petitions filed in the '710 Patent IPRs and '032 Patent IPRs because that Exhibit 1 to the Siegel Declaration is identical to a separately filed exhibit, *i.e.*, Exs. 1005, 1105, and 1205 in the '710 IPRs and Exs. 1022, 1122, and 1222 in the '032 IPRs.

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

Dated: February 27, 2017

Respectfully Submitted,

/Richard Goldenberg/  
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