

Paper No. \_\_\_\_\_

UNITED STATES PATENT AND TRADEMARK OFFICE

---

BEFORE THE PATENT TRIAL AND APPEAL BOARD

---

APPLE INC.,  
Petitioner,

v.

PARTHENON UNIFIED MEMORY ARCHITECTURE LLC,  
Patent Owner

---

Case IPR2016-01114  
Patent No. 7,777,753

---

**PETITIONER'S RESPONSE TO PATENT OWNER'S OBSERVATIONS  
ON THE CROSS-EXAMINATION OF ROBERT COLWELL, PH.D.**

This response is submitted in view of the Scheduling Order (Paper 8) and the Trial Practice Guide, 77 Fed. Reg. 48756, 48767–68 (Aug. 14, 2012). This paper responds to Patent Owner's Observations on the Cross-Examination of Robert Colwell, Ph.D. (Paper 39) filed on August 9, 2017, in the present *inter partes* review. Patent Owner presented two observations on the August 2, 2017, deposition testimony of Dr. Colwell (Ex. 2012). Petitioner responds to Patent Owner's observations below.

**Response to Observation #1:**

Patent Owner misrepresents the record. Dr. Colwell did not make any changes to his testimony. A careful comparison of Exhibit 1003 (Colwell Declaration), ¶¶ 141-144, and Exhibit 1028 (Colwell Reply Declaration), ¶¶ 9-15, will confirm that there is no change in testimony. Dr. Colwell did not answer in the affirmative that he made any changes to his testimony. *See* Ex. 2012, 39:13-40:5. Moreover, paragraph 25 of Exhibit 1028 does not contradict or contain any changes to testimony.

**Response to Observation #2:**

Patent Owner misrepresents the testimony in Exhibit 2012 from page 29, line 5 to page 36, line 6. In particular, Patent Owner misdirects by seeking to apply Dr. Colwell's testimony as to factors considered when "taking some internal

function of [a] CPU and *removing it and putting it somewhere else in the system*" (Ex. 2012, 30:13-15 (emphasis added)) to a question never actually posed, namely whether "a POSITA would have understood that the DSP of Bowes is a suitable location for the arbiter." Ex. 1028, ¶ 24. In fact, as Dr. Colwell testified, a POSITA would have considered co-locating an arbiter with a DSP. See Ex.1003, ¶¶ 145-147, pp. 107-108; Ex. 1028, ¶¶ 16-24.

Respectfully submitted,

Dated: August 15, 2017

/David W. O'Brien/

David W. O'Brien  
Lead Counsel for Petitioner  
Registration No. 40,107

HAYNES AND BOONE, LLP  
Telephone: 512/867-8457  
Facsimile: 214/200-0853

**CERTIFICATE OF SERVICE**

The undersigned certifies, in accordance with 37 C.F.R. § 42.6(e), that service was made on Patent Owner as detailed below.

*Date of service* August 15, 2017

*Manner of service* Electronic Mail to: manjom@azalaw.com;  
aalavi@azalaw.com; sclark@azalaw.com;  
mmcbride@azalaw.com; jchen@azalaw.com;  
gonsalves@gonsalveslawfirm.com

*Documents served* Petitioners' Response to Patent Owner's Observations On the Cross-Examination of Robert Colwell, Ph.D.

*Persons served* Masood Anjom  
Amir Alavi  
Scott Clark  
Michael McBride  
Justin Chen  
Gregory Gonsalves

Dated: August 15, 2017

Respectfully submitted,

/David W. O'Brien/  
David W. O'Brien  
Registration No. 40,107