```
Page 1
1
            UNITED STATES PATENT AND TRADEMARK OFFICE
             BEFORE THE PATENT TRIAL AND APPEAL BOARD
2
     APPLE, INC.,
                                           Case IPR2016-01114
3
                                           Patent No. 7,777,753
          Petitioner,
4
                                        Ş
                                          - and -
     V.
                                        8
5
                                           Case IPR2016-01135
                                        S
     PARTHENON UNIFIED MEMORY
                                          Patent No. 5,812,789
                                        8
6
     ARCHITECTURE, LLC,
                                       §
                                        8
7
          Patent Owner.
                                        8
8
9
                         ORAL DEPOSITION OF
                MITCHELL A. THORNTON, PH.D., P.E.
10
                            MAY 22, 2017
11
12
               ORAL DEPOSITION OF MITCHELL A. THORNTON,
13
     PH.D., P.E., produced as a witness at the instance
14
     of the Petitioner and duly sworn, was taken in the
     above styled and numbered cause on Monday,
16
     May 22, 2017, from 2:03 p.m. to 5:04 p.m., before
17
     Tamara Chapman, CSR, RPR, CCR (LA) in and for the
18
     State of Texas, reported by computerized stenotype
19
     machine, at the offices of Ahmad, Zavitsanos,
20
     Anaipakos, Alavi & Mensing, P.C., 1221 McKinney
21
     Street, Suite 2500, Houston, Texas 77010, pursuant
     to the Federal Rules of Civil Procedure and any
22
     provisions stated on the record herein.
23
24
25
      Job No. 124560
```

	Pag	e	2
1	APPEARANCES		
2	REPRESENTING PETITIONER:		
	Yakov Zolotorev, Esq.		
3	David Alberti, Esq.		
	FEINBERG DAY ALBERTI & THOMPSON		
4	1600 El Camino Real		
	Menlo Park, California 94025		
5			
6			
7			
8	REPRESENTING PETITIONER:		
	Michael Parsons, Esq.		
9	HAYNES AND BOONE		
	2505 N Plano Road		
10	Richardson, Texas 75082		
11			
12	-and-		
13	Raghav Bajaj, Esq.		
	HAYNES AND BOONE		
14	600 Congress Avenue		
	Austin, Texas 78701		
15			
16			
17	REPRESENTING PETITIONER:		
10	Curt Holbreich, Esq.		
18	SIDLEY AUSTIN		
1.0	555 California Street		
19 20	San Francisco, California 94104		
21			
21	DEDDECEMENT DAMENT OWNED.		
22	REPRESENTING PATENT OWNER:		
22	Masood Anjom, Esq.		
23	AHMAD, ZAVITSANOS, ANAIPAKOS, ALAVI & MENSING,		
۵ ی	1221 McKinney Street Houston, Texas 77010		
24	HOUSCOII, IEAAS //UIU		
25			



		1	Page 3
1	INDEX		
2			
_		PAGE	
3		_	
4	APPEARANCES	2	
4	MIEGUELI EUODNEONI DU D. D. E.		
5	MITCHELL THORNTON, PH.D., P.E.		
	EXAMINATION		
6	By Mr. Alberti	4	
	By Mr. Anjom	85	
7	\mathcal{D}_{I} in This emission is a second constant.	0.5	
8	EXHIBITS		
9	PAGE	LINE	
	Exhibit 1001, U.S. Patent 7,777,753 11	24	
10	(No Bates - 21 pages)		
11	Exhibit 1001, U.S. Patent 5,812,789 64	15	
	(No Bates - 13 pages)		
12			
	Exhibit 1003, Declaration of Robert 79	11	
13	Colwell, Ph.D.		
1.4	(No Bates - 85 pages)		
14	T 1-11-1 1005 T C Delegal 5 546 547	1.0	
15	Exhibit 1005, U.S. Patent 5,546,547 31	16	
16	(No Bates - 25 pages) Exhibit 1006, TMS320C8x System-Level 82	16	
10	Exhibit 1006, TMS320C8x System-Level 82 Synopsis	Τ.Ο	
17	(No Bates - 75 pages)		
18	Exhibit 1007, U.S. Patent 5,001,625 83	24	
	(No Bates - 51 pages)	۷ ۱	
19	(
	Exhibit 1011, U.S. Patent 5,787,264 55	22	
20	(No Bates - 21 pages)		
21	Exhibit 2009, Declaration of Mitchell 5	15	
	A. Thornton, Ph.D., P.E. regarding		
22	Patent 7,777,753		
	(No Bates - 43 pages)		
23			
	Exhibit 2011, Declaration of Mitchell 61		
24	A. Thornton, Ph.D., P.E. regarding		
0.5	Patent 5,812,789		
25	(No Bates - 44 pages)		



- 1 M. THORNTON 5/22/17
- MITCHELL THORNTON, PH.D., P.E.,
- having been first duly sworn, testified as
- 4 follows:
- 5 EXAMINATION
- 6 BY MR. ALBERTI:
- Q. Good afternoon, Dr. Thornton. Could you
- 9 please state your full name for the record.
- 9 A. Mitchell Aaron Thornton.
- Q. Are you acting as an expert witness for
- PUMA in the two IPRs, IPR 2016-01114 and
- ¹² IPR 2016-01135?
- 13 A. I think those numbers are correct, if
- those pertain to the '753 and '789 patent.
- Q. That's correct. We'll start with the '753
- patent and we'll ask questions about that IPR, the
- 17 1114, and then we'll turn to the '789, which is the
- 18 1135, if that's okay.
- 19 A. Sure.
- Q. Did you provide a declaration with respect
- to those two IPRs?
- 22 A. I did.
- Q. Two separate declarations, one for the
- '753 patent, and one for the '789 patent. Is that
- ²⁵ right?



- 1 M. THORNTON 5/22/17
- A. Correct.
- Q. And you're prepared to discuss your
- opinions with respect to both of those today?
- A. Correct.
- Q. Is there anything else that you believe
- you needed to do before today to be fully prepared to
- 8 testify about those opinions?
 - A. No.
- Q. Okay. We'll start with the '753, which is
- the -01114 IPR. I'm going to repurpose some exhibit
- numbers here which will correspond to the exhibit
- 13 numbers in that IPR.
- What I'd first like to do is show you
- Exhibit 2009, if you could take a look at that and
- confirm that is a declaration that you provided in
- 17 the -1114 TPR.
- A. (Reviewing document.)
- 19 It appears to be, yes.
- Q. Did you read this declaration in
- 21 preparation for today?
- 22 A. Yes.
- Q. Are the opinions contained in this
- declaration complete and accurate with respect to the
- ²⁵ '753 patent in this IPR?



DOCKET

Explore Litigation Insights



Docket Alarm provides insights to develop a more informed litigation strategy and the peace of mind of knowing you're on top of things.

Real-Time Litigation Alerts



Keep your litigation team up-to-date with **real-time** alerts and advanced team management tools built for the enterprise, all while greatly reducing PACER spend.

Our comprehensive service means we can handle Federal, State, and Administrative courts across the country.

Advanced Docket Research



With over 230 million records, Docket Alarm's cloud-native docket research platform finds what other services can't. Coverage includes Federal, State, plus PTAB, TTAB, ITC and NLRB decisions, all in one place.

Identify arguments that have been successful in the past with full text, pinpoint searching. Link to case law cited within any court document via Fastcase.

Analytics At Your Fingertips



Learn what happened the last time a particular judge, opposing counsel or company faced cases similar to yours.

Advanced out-of-the-box PTAB and TTAB analytics are always at your fingertips.

API

Docket Alarm offers a powerful API (application programming interface) to developers that want to integrate case filings into their apps.

LAW FIRMS

Build custom dashboards for your attorneys and clients with live data direct from the court.

Automate many repetitive legal tasks like conflict checks, document management, and marketing.

FINANCIAL INSTITUTIONS

Litigation and bankruptcy checks for companies and debtors.

E-DISCOVERY AND LEGAL VENDORS

Sync your system to PACER to automate legal marketing.

