### IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Patent of: Byron Hourmand

U.S. Patent No.: 5,796,183 Atty. Docket No.: 39521-0062IP1

Issue Date: August 18, 1998

Appl. Serial No.: 08/601,268

Filing Date: January 31, 1996

Title: CAPACITIVE RESPONSIVE ELECTRONIC SWITCHING

**CIRCUIT** 

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# PETITION FOR INTER PARTES REVIEW OF UNITED STATES PATENT NO. 5,796,183 PURSUANT TO 35 U.S.C. §§ 311–319, 37 C.F.R. § 42



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	_	Level of Ordinary Skill in the Art		
		Claim Construction		
		1. "providing signal output frequencies" (claims 37, 40, 105)		
	2	2. "supply voltage" (claim 37)		
	3	3. "coupled" (claims 37, 40, 105)		
III.	THE CHALLENGED CLAIMS ARE UNPATENTABLE1			
	<b>A.</b> [GROUND 1A] – Claims 105-106, 115-116, 40, 45, 47, and 48 are			
	-	obvious over Caldwell and Ingraham		
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		Related Matters Under 37 C.F.R. § 42.8(b)(2)		
		Lead And Back-Up Counsel Under 37 C.F.R. § 42.8(b)(3)		
		Service Information		



# **EXHIBITS**

APPLE-1001	U.S. Patent No. 5,796,183 to Hourmand ("the '183 patent")
APPLE-1002	Excerpts from the Prosecution History of the '183 Patent ("the Prosecution History")
APPLE-1003	Declaration of Dr. Phillip Wright
APPLE-1004	U.S. Patent No. 5,572,205 to Caldwell ("Caldwell")
APPLE-1005	U.S. Patent No. 4,561,002 to Chiu ("Chiu")
APPLE-1006	Prosecution History of Reexamination Control No. 90/012,439
APPLE-1007	Prosecution History of Reexamination Control No. 90/013,106
APPLE-1008	U.S. Patent No. 4,560,954 to Leach ("Leach")
APPLE-1009	U.S. Patent No. 4,878,107 to Hopper ("Hopper")
APPLE-1010	U.S. Patent No. 5,341,036 to Wheeler ("Wheeler")
APPLE-1011	U.S. Patent No. 4,237,421 to Waldron ("Waldron")
APPLE-1012	U.S. Patent No. 5,650,597 to Redmayne ("Redmayne")
APPLE-1013	U.S. Patent No. 4,922,061 to Meadows ("Meadows")
APPLE-1014	U.S. Patent No. 4,418,333 to Schwarzbach ("Schwarzbach")
APPLE-1015	U.S. Patent No. 4,293,734 to Pepper ("Pepper")
APPLE-1016	U.S. Patent No. 4,731,548 to Ingraham ("Ingraham '548")
APPLE-1017	U.S. Patent No. 4,758,735 to Ingraham ("Ingraham")



# Attorney Docket No. 39521-0062IP1 IPR of U.S. Patent No. 5,796,183

	IPR of U.S. Patent No. 5,796,13
APPLE-1018	U.S. Patent No. 5,189,417 to Caldwell ("Caldwell '417")
APPLE-1019	U.S. Patent No. 4,308,443 to Tucker ("Tucker")
APPLE-1020	U.S. Patent No. 4,290,061 to Serrano ("Serrano")
APPLE-1021	U.S. Patent No. 4,845,630 to Stephens ("Stephens")
APPLE-1022	U.S. Patent No. 5,048,019 to Albertsen ("Albertsen")
APPLE-1023	U.S. Patent No. 5,632,039 to Walker ("Walker")
APPLE-1024	U.S. Patent No. 5,508,653 to Chu ("Chu")
APPLE-1025	U.S. Patent No. 5,087,825 to Ingraham ("Ingraham '825")
APPLE-1026	U.S. Patent No. 4,649,323 to Pearlman ("Pearlman")
APPLE-1027	U.S. Patent No. 5,311,392 to Kinney ("Kinney")
APPLE-1028	U.S. Patent No. 4,707,852 to Jahr ("Jahr")
APPLE-1029	U.S. Patent No. 5,638,444 to Chou ("Chou")
APPLE-1030	U.S. Patent No. 5,063,383 to Bobba ("Bobba")
APPLE-1031	U.S. Patent No. 4,903,251 to Chapman ("Chapman")



Apple Inc. ("Petitioner" or "Apple") petitions for *Inter Partes* Review ("IPR") of claims 37-43, 45, 47, 48, 105-109, 115, and 116 ("the Challenged Claims") of U.S. Patent No. 5,796,183 ("the '183 patent").

### I. SUMMARY OF THE '183 PATENT

# A. Brief Description

The '183 patent relates to a capacitive responsive electronic switching circuit. APPLE-1001, Abstract. As shown in Figure 4, the circuit includes oscillator 200 (shown in blue) providing a periodic output signal, input touch terminal 450 (green) for an operator to provide an input by proximity or touch, and touch circuit 400 (orange) that provides a detection signal to microcontroller 500 (yellow) that receives the output signal from the oscillator. *Id.*, FIG. 4, 7:22-24, 12:6-28. APPLE-1003, [27]-[34] ("Technology Overview").



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