UNITED STATES PATENT AND TRADEMARK OFFICE BEFORE THE PATENT TRIAL AND APPEAL BOARD SAMSUNG ELECTRONICS CO., LTD., SAMSUNG ELECTRONICS AMERICA, INC., and APPLE INC., Petitioner, v. SMART MOBILE TECHNOLOGIES LLC, Patent Owner. Case IPR2022-01004 Patent 9,614,943

PETITIONER'S REPLY TO PATENT OWNER'S RESPONSE



TABLE OF CONTENTS

I.	IN	TRODUCTION1		
II.		OUND I RENDERS THE CHALLENGED CLAIMS OBVIOUS		
		A Reasonable Expectation of Success Exists For The Byrne-WO748 Combination (Ground 1B)		
III.		The Raleigh-Byrne Combination Renders Obvious The "Processor" Limitations (Ground 2A-2C)		
	В.	The Raleigh-Byrne Combination Renders Obvious Claims 6-7 (Ground 2A) 27		
	C.	The Raleigh-Byrne-WO748 Combination Renders Obvious Claims 3-4 (Ground 2B)		
	D.	The Raleigh-Byrne-Pillekamp Combination Renders Obvious Claims 12, 15, and 18-20 (Grounds 2C and 2E)28		
IV.	CO	NCLUSION28		



EXHIBIT LIST

EX-1001	U.S. Patent No. 9,614,943 to Sunil K Rao, et al. ("the '943 patent")
EX-1002	Excerpts from the Prosecution History of the '943 Patent ("the Prosecution History")
EX-1003	Declaration of Dr. Michael Allen Jensen
EX-1004	[RESERVED]
EX-1005	U.S. Patent No. 6,144,711 to Gregory G. Raleigh, et al. ("Raleigh")
EX-1006	U.S. Patent No. 5,784,032 to Ronald H. Johnston, et al. ("Johnston")
EX-1007	International Publication No. WO 98/27748 ("WO748")
EX-1008	European Patent Application 0 660 626 A2 to John Daniel Byrne ("Byrne")
EX-1009	U.S. Patent No. 5,594,737 to Klaus-Dieter Pillekamp ("Pillekamp")
EX-1010	U.S. Patent No. 5,590,133 to Lars Billström, et al. ("Billström")
EX-1011	P.W. Wolniansky, et al., V-BLAST: An Architecture for Realizing Very High Data Rates Over the Rich-Scattering Wireless Channel, published in 1998 URSI International Symposium on Signals, Systems, and Electronics. Conference Proceedings (Cat. No.98EX167) (October 1998) ("Wolniansky")
EX-1012	U.S. Patent No. 6,005,876 to Leonard Joseph Cimini, Jr., et al. ("Cimini")



Proceeding No. IPR2022-01004 Attorney Docket No. 39843-0128IP1

EX-1013	[RESERVED]
EX-1014	ETSI EN 301 344 V6.7.1, Digital cellular telecommunications system (Phase 2+); General Packet Radio Service (GPRS); Service description; Stage 2 (GSM 03.60 version 6.7.1 Release 1997)
EX-1015	U.S. Patent No. 5,425,050 to William F. Schreiber, et al.
EX-1016	U.S. Patent No. 5,726,978 to Carl Magnus Frodigh, et al.
EX-1017	[RESERVED]
EX-1018	J. J. Spicer, et al., Wireless office data communications using CT2 and DECT, IEE Colloquium on Personal Communications: Circuits, Systems and Technology, 1993, pp. 9/1-9/4.
EX-1019	U.S. Patent No. 6,243,581 to Jastinder Jawanda
EX-1020	Excerpts from Alan V. Oppenheim, et al., Signals and Systems, Prentice Hall, New Jersey, 1983
EX-1021	Excerpts from Theodore S. Rappaport, Wireless Communications Principles & Practice, Prentice Hall, 1996
EX-1022	R. G. Vaughan, et al., Antenna diversity in mobile communications, in IEEE Transactions on Vehicular Technology, vol. 36, no. 4, pp. 149-172, Nov. 1987
EX-1023	S. M. Alamouti, A simple transmit diversity technique for wireless communications, in IEEE Journal on Selected Areas in Communications, vol. 16, no. 8, pp. 1451-1458, Oct. 1998
EX-1024	A. A. Abidi, Direct-conversion radio transceivers for digital communications, in IEEE Journal of Solid-State Circuits, vol. 30, no. 12, pp. 1399-1410, Dec. 1995



Proceeding No. IPR2022-01004 Attorney Docket No. 39843-0128IP1

EX-1025	Yonghong Gao, et al., Low-Power Implementation of a Fifth-Order Comb Decimation Filter for Multi-Standard Transceiver Applications, Electronic System Design Laboratory, Royal Institute of Technology, Nov. 1999
EX-1026	Reza Karimi, et al., Wideband Digital Receivers for Multi- Standard Software Radios, Motorola GSM Products Division, Oct. 1997
EX-1027	Dictionary Definitions of "communication port," "I/O port," and "port" (IBM Dictionary of Computing, McGraw-Hill, Inc., August 1993)
EX-1028	Jon D. Brady, Virtual Private Networking – The Flexible Approach, Institution of Electrical Engineers, 1997
EX-1029	Excerpts from Ziemer and Tranter, Principles of Communications: Systems, Modulation, and Noise, Fourth Edition, John Wiley & Sons, New York, 1995
EX-1030	Dictionary Definition of "Nyquist Theorem" (Newton's Telecom Dictionary, Flatiron Publishing, 1998)
EX-1031	Complaint, Smart Mobile Technologies LLC v. Samsung Electronics Co. Ltd. et al., Case No. 6:21-cv-00701 (WDTX)
EX-1032	Joint Agreed Scheduling Order, Smart Mobile Technologies LLC v. Samsung Electronics Co. Ltd. et al., Case No. 6:21-cv-00701 (WDTX)
EX-1033	Complaint, <i>Smart Mobile Technologies LLC v. Apple Inc.</i> , Case No. 6:21-cv-00603 (WDTX)
EX-1034	Joint Agreed Scheduling Order, Smart Mobile Technologies LLC v. Apple Inc., Case No. 6:21-cv-00603 (WDTX)
EX-1035	U.S. Patent No. 6,175,737 to Chiiming Kao



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.

