Paper No.	

## UNITED STATES PATENT AND TRADEMARK OFFICE

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BEFORE THE PATENT TRIAL AND APPEAL BOARD

HUAWEI DEVICE USA, INC.
Petitioner
v.

SPH AMERICA, LLC Patent Owner

Patent No. 8,532,231

Inter Partes Review No. IPR2015-00203

PETITIONER'S EXHIBIT LIST (as of November 3, 2014)



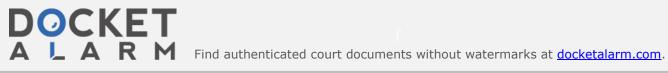
## **PETITIONER'S Exhibit List**

## as of November 3, 2014

Exhibit No.	Exhibit
1001	U.S. Patent No. 8,532,231 ("the '231 patent")
1002	Declaration of Dr. Timothy Williams ("Williams Declaration")
1003	S. M. Alamouti, "A Simple Transmit Diversity Technique For
	Wireless Communications," IEEE J. on Select Areas in
	Communications, Vol. 16, No. 8, Oct. 1998. ("Alamouti")
1004	Rosdahl, "High Throughput Study Group WG Report and Meeting
	Slides", IEEE 802.11-02/532r0 (Sep. 2002) ("Rosdahl")
1005	Hillman, "Minutes of High Throughput Study Group Meetings",
	IEEE 802.11-02/607r0 (Sept. 2002) ("Hillman")
1006	Jeon, et al., "Optimal Combining of STBC and Spatial Multiplexing
	for MIMO-OFDM," IEEE 802.11-03/0513r0 (Jul. 2003) ("Jeon")
1007	Boer, et al., "Backwards compatibility – How to make a MIMO-
	OFDM system backwards compatible and coexistence with 11a/g at
	the link level", IEEE 802.11-03/714r0 (Sept. 2003) ("Boer")
1008	Aoki, et al., "New preamble structure for AGC in a MIMO-OFDM
	system," IEEE 802.11-04/046r1, pages 1-13 (Jan. 2004) ("Aoki")
1009	U.S. Patent 7,577,085 to Narasimhan ("N'085")



1010	IEEE 802.11a Standard (1999)
1011	U.S. Patent Publication No. 2005/0054313 ("Gummadi")
1012	Liu & Li, "A MIMO System with Backwards Compatibility for
	OFDM based WLANs", 4 <sup>th</sup> IEEE Workshop on Signal Processing
	Advances in Wireless Communications, 2003. ("Liu")
1013	First Amended Complaint for Patent Infringement. SPH America,
	LLC v. Huawei Technologies, Co. Ltd., et al., Case 13-CV-2323-
	CAB-NLS (U.S. Dist. Ct. S. Cal.) filed January 3, 2014 ("Huawei
	Complaint")
1014	First Amended Complaint for Patent Infringement. SPH America,
	LLC v. ZTE (USA), Inc., Case 13-CV-2326-CAB-NLS (U.S. Dist.
	Ct. S. Cal.) filed January 9, 2014 ("ZTE Complaint")
1015	U.S. Provisional 60/500,438
1016	U.S. Patent No. 8,565,346 ("the '346 patent")
1017	Ware, et al., "HTSG Requirements – Scope and Purpose", IEEE
	802.11-02/5670r0, pp. 1-8 (Sept. 2002)
1018	Tarokh, et al., "Space-time codes for high data rate wireless
	communication: Performance criterion and code construction",
	IEEE Transactions on Information Theory, v.44, issue 2, pp. 744-
	765 (Mar. 1998)
1019	Foschini "Layered Space-Time Architecture for Wireless
	Communication in a Fading Environment When Using Multi-



	Element Antennas", Bell Laboratories Technical Journal: 41–59 (Oct. 1996)
1020	Gorokhov, et al., "MIMO-OFDM for high throughput WLAN: experimental results", IEEE 802.11-02-708rl, pp. 1-23 (Nov. 2002)
1021	Mahadevappa, et al. "Receiver Sensitivity Tables for MIMO-OFDM 802.11n," IEEE 802.11-03/845r0, pp. 1-39 (Nov. 2003)
1022	Yu, et al., "ETRI Proposal to IEEE 802.11 TGn", IEEE 802.11-04/0922r0, pp. 1-54 (Aug. 2004)
1023	Yu, et al., "ETRI proposal specification for IEEE 802.11 TGn", IEEE 802.11-04/0923r0, pp. 1-27 (Aug. 2004)

## **CERTIFICATE OF SERVICE**

The undersigned hereby certifies that a copy of the Exhibit List was served on November 3, 2014 by placing a copy into FEDERAL EXPRESS ® directed to the attorney of record for the patent at the following address: Hunton & Williams LLP, Intellectual Property Department, 220 Pennsylvania Avenue, N.W. Washington DC 20037.

By: /Troy D. Smith/

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