

UNITED STATES PATENT AND TRADEMARK OFFICE

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BEFORE THE PATENT TRIAL AND APPEAL BOARD

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APPLE, INC., HTC CORPORATION, HTC AMERICA, INC.,  
MICROSOFT CORPORATION, MICROSOFT MOBILE OY,  
MICROSOFT MOBILE INC., SAMSUNG ELECTRONICS CO., LTD.,  
SAMSUNG ELECTRONICS AMERICA, INC., and ZTE (USA) INC.,  
Petitioners,

v.

EVOLVED WIRELESS LLC,  
Patent Owner.

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Case IPR2016-00758<sup>1</sup>  
Patent 8,218,481 B2

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Before CHRISTOPHER L. CRUMBLEY, PETER P. CHEN, and  
TERRENCE W. McMILLIN, *Administrative Patent Judges*.

PETITIONERS' REPLY TO PATENT OWNER'S RESPONSE

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<sup>1</sup> IPR2016-001342 and IPR2016-01349 have been consolidated with this proceeding. IPR2017-00068 and IPR2017-00106 have been joined with IPR2016-00758. IPR2016-00981 has been joined with IPR2016-01349.

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### Exhibit List

Exhibit No. <sup>2</sup>			Short Name	Description
2016-00758	2016-01342	2016-01349		
1001	1001	1001	481 Patent	U.S. Patent No. 8,218,481
1002			Panasonic 792	“Random access burst evaluation in E-UTRA uplink,” 3GPP Tdoc R1-060792, Panasonic, TSG-RAN WG1 Meeting #44bis, Athens, Greece, March 27-31, 2006
1003	1003		Panasonic 114	“Random access design for E-UTRA uplink,” 3GPP Tdoc R1-061114, Panasonic, TSG-RAN WG1 Meeting #45, Shanghai, China, May 8-12, 2006
1004	1004	1020	Chu	“Polyphase Codes With Good Periodic Correlation Properties,” D.C. Chu, <i>IEEE Transactions on Information Theory</i> , pp. 531-32, July 1972
1005	1005		481 File History	File History of U.S. Patent Application No. 12/303,947, which issued as the 481 Patent
1006	1006		Huawei 797	“RACH design for E-UTRA,” 3GPP Tdoc R1-060797, Huawei, TSG-RAN WG1 Meeting #44bis, Athens, Greece, March 27-31, 2006
1007	1007		Samsung 028	U.S. Patent No. US 7,702,028
1008	1008		Motorola/TI 893	“Proposal for RACH Preambles,” 3GPP Tdoc TSGR1#6(99)893, Motorola and Texas Instruments, TSG-RAN WG1 Meeting #6, Espoo, Finland, July 13-16, 1999

<sup>2</sup> Pursuant to Paper 24 in IPR2016-00758, Petitioners refiled in the consolidated IPR2016-00758 proceeding the exhibits filed in IPR2016-01342 and IPR2016-01349 but not filed in IPR2016-00758. This exhibit list identifies corresponding exhibit numbers from the -1342 and -1349 proceedings where applicable.

Exhibit No. <sup>2</sup>			Short Name	Description
2016-00758	2016-01342	2016-01349		
1009	1009		TI 058	“RACH Preamble Design,” 3GPP Tdoc R1-051058, Texas Instruments, TSG-RAN WG1 Meeting #42bis, San Diego, USA, October 10-14, 2005
1010	1010		Motorola 884	“Random Access Sequence Design,” 3GPP Tdoc R1-060884, Motorola, TSG-RAN WG1 Meeting #44-bis, Athens, Greece, March 24-26, 2006
1011	1011		Nortel 908	“On the performances of LTE RACH,” 3GPP Tdoc R1-060908, Nortel Networks, TSG-RAN WG1 Meeting #44-bis, Athens, Greece, March 27-31, 2006
1012	1012		TI 867	“A new preamble shape for the Random Access preamble in E-UTRA,” 3GPP Tdoc R1-060867, Texas Instruments, TSG-RAN WG1 Meeting #44-bis, Athens, Greece, March 27-31, 2006
1013	1013		NTT/NEC 992	“Investigations on Random Access Channel Structure for E-UTRA Uplink,” 3GPP Tdoc R1-060992, NTT DoCoMo and NEC, TSG-RAN WG1 Meeting #44bis, Athens, Greece, March 27-31, 2006
1014			Min -758	Declaration of Paul S. Min, Ph.D
1015			Zhisong -758	Declaration of Zuo Zhisong
1016			Butler -758	Affidavit of Christopher Butler
1017	1017		3GPP FAQs	Printout of 3GPP FAQs
1018	1018		Delegates Corner	Printout of Delegates Corner
1019			44bis Docs	Printout of 44bis Docs FTP
1020			3/21/06 Hiramatsu E-Mail	Printout of archived version of e-mail from Katsuhiko Hiramatsu to RAN1’s e-mail exploder list on March 21, 2006
1021			Tdoclist 44bis	Printout of list of Tdocs submitted at RAN1 Meeting 44bis
1022	1022		45 Docs	Printout of 45 Docs FTP

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