

**UNITED STATES PATENT AND TRADEMARK OFFICE**

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**BEFORE THE PATENT TRIAL AND APPEAL BOARD**

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HTC CORPORATION, HTC AMERICA, INC.,  
and APPLE INC.,  
Petitioners,

v.

INVT SPE LLC,  
Patent Owner.

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Case Nos. IPR2018-01555 and IPR2018-01581  
U.S. Patent No. 7,848,439

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**PETITIONERS' UPDATED EXHIBIT LIST**

**LIST OF EXHIBITS**

<b>EXHIBIT</b>	<b>DESCRIPTION</b>	<b>DATE</b>
1001	U.S. Patent No. 7,848,439 to She et al. ("the '439 Patent")	December 7, 2010
1002	File History of the '439 Patent	n/a
1003	U.S. Patent No. 6,904,283 to Li et al. ("Li")	June 7, 2005
1004	U.S. Patent No. 7,221,680 to Vijayan et al. ("Vijayan")	May 22, 2007
1005	U.S. Patent No. 6,721,569 to Hashem et al. ("Hashem")	April 13, 2004
1006	U.S. Patent No. 5,596,604 to Cioffi et al. ("Cioffi")	January 21, 1997
1007	Declaration of Zhi Ding, Ph.D.	August 22, 2018
1008	Curriculum Vitae of Zhi Ding, Ph.D.	n/a
1009	U.S. Patent No. 6,167,031 to Olofsson et al.	December 26, 2000
1010	Complaint, <i>Inventergy, Inc. v. HTC Corporation, and HTC America, Inc.</i> , C.A. No.: 17-cv-200-VAC-CJB (D. Del. 2017)	February 27, 2017
1011	Inventergy's Voluntary Dismissal Without Prejudice	May 25, 2017
1012	Complaint, <i>INVT SPE LLC v. HTC Corporation, and HTC America, Inc.</i> , 2:17-cv-03740-JMV-JBC (D.N.J. 2017)	May 25, 2017
1013	HTC Corp. and HTC America, Inc.'s Motion To Transfer	March 9, 2018
1014	INVT'S Opposition to HTC Corp. and HTC America, Inc.'s Motion to Transfer	March 23, 2018

Petitioners' Updated Exhibit List  
(IPR2018-01555 and IPR2018-01581)

EXHIBIT	DESCRIPTION	DATE
1015	HTC Corporation and HTC America, Inc.'s Reply Brief In Support Of Their Motion To Transfer	April 2, 2018
1016	Declaration of Zhi Ding, Ph.D. in Support of Petitioners' Consolidated Reply to Patent Owner's Consolidated Response	October 30, 2019
1017	Transcript of Deposition of Dr. Branimir Vojcic in this consolidated <i>inter partes</i> review proceeding	October 3, 2019
1018	Jacky S. Chow, Jerry C. Tu, and John M. Cioffi, <i>A Discrete Multitone Transceiver System for HDSL Applications</i> , IEEE JOURNAL ON SELECTED AREAS IN COMMUNICATIONS, Vol. 9, No. 6, Pgs. 895-908	August 1991
1019	N.M. Maslin, <i>High data rate transmissions over h.f. links</i> , Radio and Electronic Engineer, Vol. 52, No. 2, Pgs. 75-87	February 1982
1020	Sections 6.3.10.1, 6.3.17.4 and 8.1.4.1.2.5 from the IEEE 802.16-2004 Standard	October 1, 2004
1021	Section 3.7 of Erik Dahlman, Stefan Parkvall, and Johan Sköld, 4G LTE/LTE-ADVANCED FOR MOBILE BROADBAND	2011
1022	Peter S. Chow, John M. Cioffi, and John A.C. Bingham, <i>A Practical Discrete Multitone Transceiver Loading Algorithm for Data Transmission over Spectrally Shaped Channels</i> , IEEE TRANSACTIONS ON COMMUNICATIONS, Vol. 43, No. 2/3/4, Pg. 773	1995

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(IPR2018-01555 and IPR2018-01581)

EXHIBIT	DESCRIPTION	DATE
1023	Andreas Czylik, <i>Adaptive OFDM for wideband radio channels</i> , PROCEEDINGS OF 1996 IEEE GLOBAL TELECOMMUNICATIONS CONFERENCE, Vol. 1, pp. 713-718	1996
1024	Alexander M. Wyglinski, Fabrice Labeau, and Peter Kabal, <i>An Efficient Bit Allocation Algorithm for Multicarrier Modulation</i> , IEEE WIRELESS COMMUNICATIONS AND NETWORKING CONFERENCE, Pg. 1194, 1195	March 21-25, 2004
1025	Liastos Christos, Koutitas George, <i>Virtual Labs #2: 'Fading Process-Channel Characterization': Documentation</i> , International Hellenic University	September 2010
1026	Ranjeet Mohapatra, Sameer Ranjan Behera, <i>Application of Visual Simulation in Communication Systems</i> , National Institute of Technology	2007-2008

Dated: October 31, 2019

Respectfully submitted,

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**CERTIFICATE OF SERVICE**

Pursuant to 37 C.F.R. § 42.6(e), the undersigned certifies that on October 31, 2019, a complete and entire copy of the Petitioners' Updated Exhibit List was served via email to all parties to this proceeding at the addresses indicated:

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