

UNITED STATES PATENT AND TRADEMARK OFFICE

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BEFORE THE PATENT TRIAL AND APPEAL BOARD

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GOOGLE LLC  
Petitioner

v.

AGIS SOFTWARE DEVELOPMENT, LLC  
Patent Owner

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Case IPR2018-01083  
Patent 9,445,251

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**DECLARATION OF DAVID HILLIARD WILLIAMS IN SUPPORT OF  
PETITION FOR *INTER PARTES* REVIEW OF U.S. PATENT NO. 9,445,251**

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## EXHIBIT LIST

Exhibit No.	Description
1001	U.S. Patent No. 9,445,251 to Beyer, Jr. <i>et al.</i> , issued September 13, 2016 (“251 Patent”)
1002	File History of U.S. Patent No. 9,445,251 (“251 Patent File History”)
1003	Declaration of David Hilliard Williams (“Williams”)
1004	<i>Curriculum Vitae</i> of David Hilliard Williams
1005	U.S. Patent No. 6,366,782 to Fumarolo <i>et al.</i> , issued April 2, 2002 (“Fumarolo-782”)
1006	U.S. Patent No. 6,204,844 to Fumarolo <i>et al.</i> , issued March 20, 2001 (“Fumarolo-844”)
1007	U.S. Patent Application Publication No. 2002/0173906 to Muramatsu, published November 21, 2002, (“Muramatsu”)
1008	U.S. Patent Application Publication No. 2002/0027901 to Liu <i>et al.</i> , issued March 7, 2002 (“Liu”)
1009	Plaintiff’s Original Complaint for Patent Infringement, <i>AGIS Software Development LLC v. Huawei Device USA Inc., et al.</i> , Case No. 2:17-cv-00513 (TXED), filed June 21, 2017. (“Infringement Complaint”)
1010	U.S. Patent No. 7,031,728 to Beyer, Jr., issued April 18, 2006 (“728 Patent”)
1011	U.S. Patent No. 7,630,724 to Beyer, Jr. , <i>et al.</i> , issued December 8, 2009 (“724 Patent”)
1012	911 and E911 Services, Federal Communications Commission, <a href="http://www.fcc.gov/e911">www.fcc.gov/e911</a> (last visited May 7, 2018)
1013	Fact Sheet, FCC Wireless 911 Requirements (January 2001), available at <a href="https://transition.fcc.gov/pshs/services/911-services/enhanced911/archives/factsheet_requirements_012001.pdf">https://transition.fcc.gov/pshs/services/911-services/enhanced911/archives/factsheet_requirements_012001.pdf</a>
1014	Jock Christie, <i>et al.</i> , <i>Development and Deployment of GPS Wireless Devices for E911 and Location Based Services</i> (Position, Location, and Navigation Symposium, 2002) (“Christie”)
1015	Dale N. Hatfield, <i>A Report on Technical and Operational Issues Impacting The Provision of Wireless Enhanced 911 Services</i> , Federal Communications Commission (2002) (“Hatfield”)
1016	Charles E. Perkins, “Ad Hoc Networking.” Nokia Research Center (November 28, 2000) (“Perkins”)

<b>Exhibit No.</b>	<b>Description</b>
<b>1017</b>	Duncan Scott Sharp, <i>Adapting Ad Hoc Network Concepts to Land Mobile Radio Systems</i> (1972 Ph.D. dissertation, University of Alberta) (on file with Simon Fraser University, December 2002) (“Duncan”)
<b>1018</b>	Madhavi W. Subbarao, <i>Mobile Ad Hoc Data Networks for Emergency Preparedness Telecommunications - Dynamic Power-Conscious Routing Concepts</i> (Submitted as an interim project for Contract Number DNCR086200 to the National Communications Systems, February 1, 2000) (“Subbarao”)
<b>1019</b>	<i>Intentionally Left Blank</i>
<b>1020</b>	McKinsey & Company, <i>The McKinsey Report : FDNY 9/11 Response</i> (2002) (“The McKinsey Report”)
<b>1021</b>	William K. Rashbaum, <i>Report on 9/11 Finds Flaws In Response of Police Dept.</i> , N.Y. Times (July 27, 2002), available at <a href="http://www.nytimes.com/2002/07/27/nyregion/report-on-9-11-finds-flaws-in-response-of-police-dept.html?mcubz=0">http://www.nytimes.com/2002/07/27/nyregion/report-on-9-11-finds-flaws-in-response-of-police-dept.html?mcubz=0</a>
<b>1022</b>	Fred Durso, Jr., <i>A Decade of Difference</i> , NFPA Journal (Sept. 1, 2011), available at <a href="http://www.nfpa.org/news-and-research/publications/nfpa-journal/2011/september-october-2011/features/a-decade-of-difference">http://www.nfpa.org/news-and-research/publications/nfpa-journal/2011/september-october-2011/features/a-decade-of-difference</a>
<b>1023</b>	“Locate-Track-Extract; Wireless Mesh Networking Allows Commanders to Keep Track of Firefighters at an Incident Scene,” <i>Mission Critical Communications</i> , March 2004
<b>1024</b>	U.S. Patent Publication No. 2003/0100326 to Grube <i>et al.</i> , published May 29, 2003 (“Grube”)
<b>1025</b>	U.S. Patent No. 6,654,683 to Jin <i>et al.</i> , issued November 25, 2003 (“Jin”)
<b>1026</b>	U.S. Patent No. 6,119,017 to Cassidy <i>et al.</i> , issued September 12, 2000 (“Cassidy”)
<b>1027</b>	U.S. Patent No. 5,563,931 to Bishop <i>et al.</i> , issued October 8, 1996 (“Bishop”)
<b>1028</b>	Ching-Chien Chen, et al., <i>Automatically and Accurately Conflating Satellite Imagery and Maps</i> (University of Southern California, October 2003) (“Chen”)

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