UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

DISH Network L.L.C.
Petitioner

v.

TQ Delta LLC,
Patent Owner

Case No. IPR2016-01469
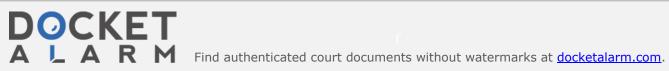U.S. Patent No. 9,094,268

PETITIONER'S EXHIBIT LIST

Ex. No.	Description of Document
1001	U.S. Patent No. 9,094,268 to Tzannes ("the '268 patent")
1002	Declaration of Leo Hoarty ("Hoarty Decl.")
1003	File History for U.S. Patent No. 9,094,268
1004	U.S. Patent No. 5,956,323 to Bowie ("Bowie")
1005	U.S. Patent No. 6,236,674 to Morelli, et al. ("Morelli")
1006	ANSI T1.413-1995 – Network and Customer Installation Interfaces – Asymmetric Digital Subscriber Line (ADSL) Metallic Interface (Aug. 18, 1995) ("1995 ADSL Standard")
1007	American National Standards Institute, "Procedures for the Development and Coordination of American National Standards" (March 22, 1995)
1008	Library of Congress, Excerpts from "Network and Customer Installation Interfaces – Asymmetric Digital Subscriber Line (ADSL) Metallic Interface" (Stamped Feb. 2, 1996)
1009	Linda Hall Library, Excerpts from "Network and Customer Installation Interfaces – Asymmetric Digital Subscriber Line (ADSL) Metallic Interface" (Stamped Apr. 15, 1996)
1010	Zogakis and Cioffi, "The Effect of Timing Jitter on the Performance of a Discrete Multitone System" (Jul. 1996)
1011	U.S. Patent No. 6,144,695 to Helms et al.
1012	U.S. Patent No. 5,815,505 to Mills
1013	U.S. Patent No. 5,974,139 to McNamara et al.
1014	U.S. Patent No. 6,091,722 to Russell et al.
1015	U.S. Patent No. 6,134,274 to Sankaranarayanan et al.
1016	Curriculum Vitae of W. Leo Hoarty

Ex. No.	Description of Document
1017	Edfors, et al., "An introduction to orthogonal frequency-division multiplexing" (Sept. 1996)
1018	Franks, "Carrier and Bit Synchronization in Data Communication – A Tutorial Review" (Aug. 1980)
1019	Hall, "Selecting an ADSL transceiver: ANSI standard offers two levels of modem performance" (Oct. 1, 1997)
1020	"Learning About Saving Energy" (Jan. 1995)
1021	"Technical Report TR-001: ADSL Forum System Reference Model" (May 1996)
1022	"Technical Report TR-005: ADSL Network Element Management" (Mar. 1998)
1023	"Technical Report TR-007: Interfaces and System Configurations for ADSL: Customer Premises" (Mar. 1998)
1024	"TR-013: Interfaces and System Configuration for ADSL Central Office" (Jan. 1999)
1025	"Technical Report TR-022: The Operation of ADSL-based Networks" (1999)
1026	"DSL Forum Technical Report TR-023: Overview of ADSL Testing" (May 26, 1999)
1027	"Technical Report TR-026: T1.413 Issue 2 ATM based ADSL ICS" (Sep. 9, 1999)
1028	"Technical Report TR-029: ADSL Dynamic Interoperability Testing" (Feb. 2000)
1029	"Technical Report, DSL Forum TR-031: ADSL ANSI T1.413-1998 Conformance Testing" (Mar. 2000)
1030	"Technical Report, DSL Forum TR-033: ITU-T G.992.2 (G.lite) ICS" (Mar. 2000)

Ex. No.	Description of Document
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1032	Bingham, "ADSL, VDSL, and Multicarrier Modulation" (2000)
1033	Kitz, "ADSL Technology and DMT"
1034	Tretter, "Communication System Design using DSP Algorithms" (2008)
1035	EE Times, "ADSL Technology Explained, Part 1: The Physical Layer" (Mar. 2001)
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1036	EE Times, "ADSL2: Taking the Next Step in Broadband Designs" (Jul. 2002)
1037	Rorke, "Introduction to Copper Access Technologies and ADSL," Rhodes University Computer Science Honours (1997)
1038	Tuijl, "Modem Techniques"
1039	Frenzel, "Network Timing Reference from Frequency Synchronization in xDSL based Access Networks" (Nov. 2010)
1040	Cordes and Johansson, "Synchronization in ADSL Modems" (Dec. 1998)
1041	University of California, "Overview of Cell Phone Technology"
1042	Radio-Electronics, "GSM Power Control and Power Class"
1043	ETSI, "Speech and multimedia Transmission Quality (STQ); QoS aspects for popular services in mobile networks; Part 2: Definition of Quality of Service parameters and their computation" (2016)
1044	Pettit, "Video Dialtone: Reflections on Changing Perspectives in Telecommunications Regulation," Harvard Journal of Law and Technology, Vol. 6 (1993)

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1046	Hernandez, "April 20, 1964: Picturephone Dials Up First Transcontinental Video Call" (Apr. 2012)
1047	DSL Forum, "ADSL2 and ADSL2plus – The New ADSL Standards" (Mar. 2003)
1048	Abramson, "The Alohoa System – Another alternative for computer communications", Fall Joint Computer Conference (1970)
1049	IEEE, "IEEE Standard for Ethernet" (Dec. 2012)
1050	Joint Claim Construction Chart, *TQ Delta v. Dish Network Corp. et al.*, 15-cv-00614 (Jun. 30, 2016)
1051	European Patent Publication No. EP 0883269 to Vanzieleghem ("Vanzieleghem")
1052	Website, "Streaming Video: Internet Broadcasting for the Masses" (1998)
1053	EE Times, "ADSL Technology Explained, Part 2: Getting to the Application Layer" (Apr. 2001)
1054	U.S. Patent No. 6,181,711 to Zhang, et al.
1055	Biography of Stephen McBride
1056	Declaration of Stephen McBride ISO Motion for Pro Hac Vice Admission

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