UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

DISH NETWORK LLC,
Petitioner

v.

ENTROPIC COMMUNICATIONS, LLC,
Patent Owner

Case IPR2024-00373
Patent 7,594,249 B2

PETITIONER'S UPDATED EXHIBIT LIST

LIST OF EXHIBITS

DISH-1001	U.S. Patent 7,594,249 to Gurantz *et al.* ("the '249 patent")
DISH-1002	Excerpts from the Prosecution History of the '249 Patent ("the Prosecution History")
DISH-1003	Declaration of Dr. Scott Acton
DISH-1004	Curriculum Vitae of Dr. Scott Acton
DISH-1005	U.S. Patent 7,127,734 to Amit et al. ("Amit")
DISH-1006	Excerpts from Dennis J. Rauchmayer, *ADSL/VDSL Principles*, 1999 ("ADSL/VDSL")
DISH-1007	Jacobsen et al., *An Efficient Digital Modulation Scheme for Multimedia Transmission on the Cable Television Network*, 43rd Annual National Cable Television Association Convention and Exposition, New Orleans, LA. 1994 ("Jacobsen")
DISH-1008	Excerpts from Walter Y. Chen, *DSL: Simulation Techniques and Standards Development for Digital Subscriber Lines*, 1998 ("DSL Simulation Techniques")
DISH-1009	Proof of Service of Summons and Complaint on DISH Network Corporation in *Entropic Communications, LLC v. DISH Network Corporation et al.*, Case 2:23-cv-01043, ECF No. 14 (C.D. Cal. Feb. 23, 2023)
DISH-1010	Weinberg, G. (1972). Cost Analysis of CATV Components. Final Report. ("Weinberg")
DISH-1011	Dodds, D. E., & Swanson, L. (1999, August). Simultaneous voice and Internet data on rural subscriber lines. In 1999 IEEE Pacific Rim Conference on Communications, Computers and Signal Processing (PACRIM 1999). Conference Proceedings (Cat. No. 99CH36368) (pp. 18-21). IEEE. ("Dodds")

DISH-1012	Maxemchuk, N., & Netravali, A. (1985). Voice and Data on a CATV Network. IEEE Journal on Selected Areas in Communications, 3(2), 300-311 ("Maxemchuk")
DISH-1013	Jacobsen, K. S. (1997, November). Synchronized Discrete Multi-Tone (SDMT) Modulation for Cable Modems: Making the Most of the Scarce Reverse Channel Bandwidth. In WESCON/97 Conference Proceedings (pp. 374-380). IEEE. ("Jacobsen-2")
DISH-1014	Fryxell, D., Lanning, S., & Sirbu, M. (1999). Broadband Access Networks and the Emergence of Voice over IP (VoIP): an Economic Analysis for Cable and ADSL. In 27th Annual Telecommunications Policy Research Conference, Alexandria, VA ("Fryxell")
DISH-1015	Lipoff, S. J. (1994). Personal communications networks bridging the gap between cellular and cordless phones. Proceedings of the IEEE, 82(4), 564-571 ("Lipoff")
DISH-1016	S. Ovadia, "Advanced upstream CATV access technologies and standards," 1999 Digest of the LEOS Summer Topical Meetings: Nanostructures and Quantum Dots/WDM Components/VCSELs and Microcavaties/RF Photonics for CATV and HFC Systems (Cat. No.99TH8455), San Diego, CA, USA, 1999, pp. IV35-IV36 ("Ovadia")
DISH-1017	Roden, M. S. (1985). Analog and digital communication systems. Prentice-Hall, Inc. ("Roden")
DISH-1018	Jorasch, R., & Price, K. (1988, March). Advanced satellite system architecture for VSATs with ISDN compatibility. In 12th International Communication Satellite Systems Conference ("Jorasch")
DISH-1019	Smalley, D. (1994). Equalization concepts: a tutorial. Atlanta Regional Technology Center, Texas Instruments ("Smalley")

DISH-1020	Santella, G., & Mazzenga, F. (1998). A hybrid analytical-simulation procedure for performance evaluation in M-QAM-OFDM schemes in presence of nonlinear distortions. IEEE Transactions on Vehicular Technology, 47(1). ("Santella")
DISH-1021	Corvaja, R., Costa, E., & Pupolin, S. (1998, October). Analysis of M-QAM-OFDM transmission system performance in the presence of phase noise and nonlinear amplifiers. In 1998 28th European Microwave Conference (Vol. 1, pp. 481-486). IEEE.
DISH-1022	Declaration of June Munford
DISH-1023	Excerpts from the Prosecution History of U.S. Patent 7,127,734 to Amit ("the Amit Prosecution History")
DISH-1024	Federal Court Management Statistics for September 2023 published by the Administrative Office of the U.S. Courts, retrieved from https://www.uscourts.gov/sites/default/files/data_tables/fcms_na_distcomparison0930.2023.pdf
DISH-1025	Order Granting Stipulation Setting Claim Construction Schedule, *Entropic Communications, LLC v. DISH Network Corporation et al*., Case 2:23-cv-01043-JWH-KES (CDCA)
DISH-1026	LegalMetric Time to Trial Report, Central District of California, Patent Cases (Jan. 2023 – Nov. 2023)
DISH-1027	Declaration of Michael J. Ballanco in Support of Motion for *Pro Hac Vice* Admission
DISH-1028	Declaration of Aaron P. Pirouznia in Support of Notice of Intent to Designate a Provisionally Recognized PTAB Attorney
DISH-1029	Deposition Testimony of Mr. Regis J. Bates, Jr. (January 7, 2025)
DISH-1030	Second Declaration of Dr. Scott Acton

DISH-1031	Second Declaration of June Munford
DISH-1032	Czylwik, A. (1998, May). Synchronization for single carrier modulation with frequency domain equalization. In VTC'98. 48th IEEE Vehicular Technology Conference. Pathway to Global Wireless Revolution (Cat. No. 98CH36151) (Vol. 3, pp. 2277-2281). IEEE. ("Czylwik")
DISH-1033	Chow, J. S., Cioffi, J. M., & Bingham, J. A. (1993, May). Equalizer training algorithms for multicarrier modulation systems. In Proceedings of ICC'93-IEEE International Conference on Communications (Vol. 2, pp. 761-765). IEEE. ("Chow")
DISH-1034	Chow, J. S., Cioffi, J. M., & Bingham, J. A. A Computationally Efficient Adaptive Transceiver for High-Speed Digital Subscriber Lines. In Proceedings 1990 International Conference on Communications, June 1990. Boston, MA. ("Chow II")
DISH-1035	Chow, J.S. Finite-length Equalization for Multi-carrier Transmission Systems. PhD thesis, Stanford University, June 1992.
DISH-1036	Busigin, A. (1986). FFT software for the IBM PC. IEEE MICRO, 6(1), 6-6.
DISH-1037	Van der Perre, L., Thoen, S., Vandenameele, P., Gyselinckx, B., & Engels, M. (1998, November). Adaptive loading strategy for a high speed OFDM-based WLAN. In IEEE GLOBECOM 1998 (Cat. NO. 98CH36250) (Vol. 4, pp. 1936-1940). IEEE.
DISH-1038	Salz, J., & Weinstein, S. B. (1969, October). Fourier transform communication system. In Proceedings of the first ACM symposium on Problems in the optimization of data communications systems (pp. 99-128).

DISH-1039	Press, W. H., Vetterling, W. T., Teukolsky, S. A., & Flannery, B. P. (1988). Numerical recipes (pp. 289-293). Cambridge University Press, London, England.
DISH-1040	Grass, E., Tittelbach-Helmrich, K., Jagdhold, U., Troya, A., Lippert, G., Kruger, O., ... & Mahonen, P. (2001). On the single-chip implementation of a Hiperlan/2 and IEEE 802.11 a capable modem. IEEE Personal Communications, 8(6), 48-57
DISH-1041	DVB-T: "Press Release – April 27, 1998" (PDF). 4 June 2000. Archived (PDF) from the original on 4 June 2000. Retrieved 5 February 2020.
DISH-1042	Regis J. Bates, *Voice & Data Communications Handbook*, 4th ed., July 2001
DISH-1043	Petitioner's Demonstratives
DISH-1044	Corrected Petitioner's Demonstratives

Respectfully submitted,

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/Alyaman Amer/

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CERTIFICATE OF SERVICE

Pursuant to 37 CFR § 42.6(e), the undersigned certifies that on May 8, 2025, a complete and entire copy of this Petitioner's Updated Exhibit List and Demonstratives were provided via email to the Patent Owner by serving the email correspondence addresses of record as follows:

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