

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

COMCAST CABLE COMMUNICATIONS, LLC,
Petitioner,

v.

ENTROPIC COMMUNICATIONS, LLC,
Patent Owner.

Case IPR2024-00431
Patent 7,295,518

PETITIONER'S UPDATED EXHIBIT LIST

EXHIBITS

Previously Filed:

- Ex. 1001: U.S. Pat. No. 7,295,518 (“the ’518 patent”)
- Ex. 1002: Expert Declaration of James Bertonis
- Ex. 1003: *Reserved*
- Ex. 1004: Certified Prosecution History of the ’518 patent
- Ex. 1005: Certified Prosecution History of the U.S. Appl. No. 10/230,687 (“the ’687 application”)
- Ex. 1006: U.S. Pub. No. 2006/0218593 (“Afshary”)
- Ex. 1007: EP Pub. No. 1087586A2 (“Mirfakhraei”)
- Ex. 1008: U.S. Pub. No. 2001/0031016 (“Seagraves”)
- Ex. 1009: Bingham, John A.C., “Multicarrier Modulation for Data Transmission: An Idea Whose Time Has Come,” *IEEE Communication Magazine*, vol. 28, no. 5, pp. 5-14, May 1990 (“Bingham”)
- Ex. 1010: Jacobsen, Krista S., “Synchronized Discrete Multi-Tone (SDMT) Modulation for Cable Modems: Making the Most of the Scarce Reverse Channel Bandwidth,” *IEEE, WESCON/97 Conference Proceedings*, November 6, 1997 (“Jacobsen 97”)
- Ex. 1011: Wu, Yiyan et al., “Orthogonal Frequency division Multiplexing: A Multi-Carrier Modulation Scheme,” *IEEE Transactions on Consumer Electronics*, vol. 41, no. 3, August 1995 (“Wu”)
- Ex. 1012: U.S. Pat. No. 6,807,146 (“McFarland”)
- Ex. 1013: U.S. Pat. No. 6,456,653 (“Sayeed”)
- Ex. 1014: R. Baines, “Line Code Debates,” *Electronic Design*, vol. 45, no. 6, pp. 142-146, March 1997 (“Baines”)

- Ex. 1015: Esvelt, Mirfakhraei.B.P., “A multicarrier modem architecture for VDSL,” 1997 (“Esvelt”)
- Ex. 1016: U.S. Pat. No. 6,091,932 (“Langlais”)
- Ex. 1017: Sari, Hikmet, et al., “Extending the Capacity of Multiple Access Channels,” *IEEE communications Magazine*, vol. 38, no. 1, pp. 74-82, January 2000 (“Sari”)
- Ex. 1018: Jacobsen, Krista et al., “An Efficient Digital Modulation Scheme for Multimedia Transmission on the Cable Television Network,” *43rd Annual National Cable Television Association (NTCA) Convention and Exposition*, New Orleans, LA. 1994 (“Jacobsen 94”)
- Ex. 1019: Haykin, Simon, *Communication Systems*, 3rd ed., Wiley & Sons, 1994 (“Haykin”)
- Ex. 1020: Lathi, B.P., *Linear Systems and Signals*, Cambridge Press, 1992 (“Lathi”)
- Ex. 1021: Oppenheim, Alan V. et al., *Discrete-Time Signal Processing*, Prentice Hall PTR, 1989 (“Oppenheim”)
- Ex. 1022: U.S. Patent No. 6,737,984 to Welles, II et al. (“Welles”)
- Ex. 1023: Couch II, Leon W., *Digital and Analog Communication Systems*, 4th ed., Macmillan Publishing Company, 1993 (“Couch”)
- Ex. 1024: Ciciora, Walter S. *Modern Cable Television Technology: Video, Voice, and Data Communications*. San Francisco, Calif: Morgan Kaufmann Publishers, 1999, Sections 4.1-4.3.3 (Chapter 4, pp. 161-192) (“Ciciora”)
- Ex. 1026: Transcript of January 15, 2025 deposition of Albert Garrett in *Dish Network, LLC et al. v. Entropic Communications, LLC*, IPR2024-00393 (USP 7,295,518)
- Ex. 1027: U.S. Pat. No. 6,091,932 (“Langlais”) (same as Ex. 1016)
- Ex. 1028: U.S. Pat. No. 5,959,967 (“Humphrey”)

- Ex. 1029: U.S. Pat. No. 6,438,174 (“Isaksson”)
- Ex. 1030: U.S. Pat. No. 6,259,746 (“Levin”)
- Ex. 1031: Rauschmayer, Dennis. J., *ADSL/VDSL Principles, A Practical and Precise Study of Asymmetric Digital Subscriber Lines and Very High Speed Digital Subscriber Lines*, Macmillan Technical Publishing, 1999 (Chapters 2, 8 and 9)
- Ex. 1032: Transcript of February 28, 2025 deposition of Albert Garrett in *Comcast Cable Communications, LLC v. Entropic Communications, LLC*, IPR2024-00431 (USP 7,295,518)
- Ex. 1033: Tanenbaum, Andrew S., *Computer Networks*, 3rd ed., Prentice Hall PTR, 1996, § 1.2 (pp. 7-16), § 2.2 (pp. 82-94), § 4.3 (pp. 275-304) (“Tanenbaum”)
- Ex. 1034: Brebner, Gordon, *Computers in Communication*, 1st ed., McGraw-Hill International (UK) Limited, 1997, Ch. 1 (pp. 1-34), Ch. 5 (pp. 138-167), Ch. 6 (pp. 168-221) (“Brebner”)
- Ex. 1035: Ciciora, Walter S. *Modern Cable Television Technology: Video, Voice, and Data Communications*. San Francisco, Calif: Morgan Kaufmann Publishers, 1999, § 9.2.3 (Chapter 9, pp. 386-88) (“Ciciora”)
- Ex. 1036: Reply Declaration of James G. Bertonis In Support of Petitioner’s Reply
- Ex. 1037: Entropic Communications, LLC’s Opening Claim Construction Brief, *Entropic Communications, LLC v. Dish Network Corp. et al.*, 2:23-cv-1043-JWH-KES (Lead Case), Document 559, filed December 13, 2024
- Ex. 1038: *Entropic Communications, LLC v. DISH Network Corporation, et al.*, Case 2:23-cv-01043, Claim Construction Order, Dkt. 635 (C.D. Cal. Apr. 17, 2025)

Previously Served (Not Filed):

- Ex. 1025: Expert Declaration of Sylvia Hall-Ellis, Ph.D

Filed Herewith:

Ex. 1039: Petitioner's Oral Argument Demonstrative

Respectfully submitted,

Dated: June 2, 2025

By: /Frederic M. Meeker/

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CERTIFICATE OF SERVICE

Pursuant to 37 C.F.R. § 42.6(e), the undersigned hereby certifies that the foregoing PETITIONER'S UPDATED EXHIBIT LIST and new Exhibit 1039 were served electronically via e-mail on June 2, 2025 on the following counsel of record for Patent Owner:

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By: /Carlos Goldie/

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