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UNITED STATES PATENT AND TRADEMARK OFFICE

PATENT: 7,116,710

INVENTORS: HUI JIN, AAMOD KHANDEKAR, ROBERT J. MCELIECE

FILED: MAY 18, 2001

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TITLE: SERIAL CONCATENATION OF INTERLEAVED
                    CONVOLUTIONAL CODES FORMING TURBO-LIKE
                    CODES

BEFORE THE PATENT TRIAL AND APPEAL BOARD

Apple Inc.
Petitioner

v.

California Institute of Technology
Patent Owner

Case IPR2017-00210

PETITIONERS' UPDATED EXHIBIT LIST

EXHIBITS

Exhibit	Description
1001	U.S. Patent 7,116,710
1002	Replacement copy of Frey, B. J. and MacKay, D. J. C., "Irregular Turbocodes," *Proc. 37th Allerton Conf. on Comm., Control and Computing*, Monticello, Illinois, published on or before March 20, 2000
1003	Replacement copy of D. Divsalar, H. Jin, and R. J. McEliece, "Coding theorems for "turbo-like" codes," *Proc. 36th Allerton Conf. on Comm., Control and Computing*, Allerton, Illinois, pp. 201-10, March, 1999
1004	Luby, M. *et al.*, "Analysis of Low Density Codes and Improved Designs Using Irregular Graphs," *STOC '98*, pp. 249-59, published in 1998
1005	Pfister *et al.*, "The Serial Concatenation of Rate-1 Codes Through Uniform Random Interleavers" (Exhibit 1 to the Siegel Declaration)
1006	Declaration of Professor James Davis, Ph.D. ("Davis Declaration")
1007	Gallager, R., *Low-Density Parity-Check Codes*, Monograph, M.I.T. Press, 1963
1008	Berrou *et al.*, "Near Shannon Limit Error-Correcting Coding and Decoding: Turbo Codes," *ICC '93*, Technical Program, Conference Record 1064, Geneva 1993
1009	MacKay, D. J. C, and Neal, R. M. "Near Shannon Limit Performance of Low Density Parity Check Codes," *Electronics Letters*, vol. 32, pp. 1645-46, 1996
1010	Benedetto, S. et al., *Serial Concatenation of Block and Convolutional Codes*, 32.10 Electronics Letters 887-8, 1996
1011	Luby, M. *et al.*, "Practical Loss-Resilient Codes," *STOC '97*, 1997
1012	Declaration of Robin Fradenburgh Concerning the "Proceedings, 36th Allerton Conference on Communications, Control, and Computing" Reference

1013	Frey, B. J. and MacKay, D. J. C., "Irregular Turbo-Like Codes" presented at the 1999 Allerton Conference on Communications, Control, and Computing.
1014	Prosecution History of the '710 Patent, Response Dated May 5, 2005
1015	Table of Contents of *Proceedings of the 37th Allerton Conference on Communication, Control and Computing* from September 22-24, 1999
1016	Joint Claim Construction Statement (Case No. 2:13-cv-07245, Dkt. No. 47)
1017	Expert Report of Dr. Brendan Frey (Case No. 2:13-cv-07245)
1018	Aamod Khandekar, "Graph-based Codes and Iterative Decoding," Thesis submitted June 10, 2002
1019	Richardson, Shokrollahi, and Urbanke, "Design of Provably Good Low-Density Parity Check Codes"
1020	Replacement copy of the Declaration of Paul H. Siegel
1021	U.S. Provisional Application No. 60/205,095
1022	Mitzenmacher, M. "Studying balanced allocations with differential equations," *Combinatorics, Probability & Computing* 8.5, pp. 473-482, September 1999
1023	Barg *et al.*, "Linear-time Binary Codes Correcting Localized Erasures," *IEEE Transactions on Information Theory* 45.7, pp. 2545-2550, November 1999
1024	Shokrollahi, "New Sequences of Linear Time Erasure Codes Approaching the Channel Capacity," *Applied Algebra, Algebraic Algorithms and Error-Correcting Codes*, pp. 65-76, 1999
1025	Declaration Of Richard Goldenberg In Support Of Unopposed Motions To Submit Replacement Exhibits Pursuant To 37 C.F.R. § 42.104(c)
1026	Declaration Of Jonathan Barbee In Support Of Unopposed Motions To Submit Replacement Exhibits Pursuant To 37 C.F.R. § 42.104(c)

Dated: February 28, 2017

Respectfully Submitted,

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