

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

SIRIUS XM RADIO INC.,
Petitioner,

v.

FRAUNHOFER-GESELLSCHAFT ZUR
FÖRDERUNG DER ANGEWANDTEN
FORSCHUNG E.V.,
Patent Owner.

Case IPR2018-00682
Patent No. 6,931,084

PETITIONER'S EXHIBIT LIST

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EXHIBIT NO.	DESCRIPTION
Exhibit-1001	U.S. Patent No. 6,931,084 (the “1084 Patent”) titled, Differential Coding and Carrier Recovery for Multicarrier Systems, issued on August 16, 2005
Exhibit-1002	Declaration of David Lyon, Ph.D., in support of Petition for <i>Inter Partes Review</i> of U.S. Patent 6,931,084, dated February 21, 2018 (“Lyon Dec.”)
Exhibit-1003	Prosecution History of U.S. Patent No. 6,931,084 (excerpts)
Exhibit-1004	U.S. Patent No. 5,166,924 (“Moose ‘924”) titled, Echo Cancellation in Multi-Frequency Differentially Encoded Digital Communications, issued on November 24, 1992
Exhibit-1005	U.S. Patent No. 5,732,105 (“Andren”) titled, Method of Estimating Signal Quality in a DPSK Demodulator, issued on March 24, 1998
Exhibit-1006	U.S. Patent No. 6,341,123 (“Tsujiishita”) titled, Digital Audio Broadcasting Receiver, issued on January 22, 2002
Exhibit-1007	P. H. Moose, <i>Differential Modulation and Demodulation of Multi-Frequency Digital Communications Signals</i> , IEEE, 1990 (“Moose 1990”)
Exhibit-1008	U.S. Patent No. 5,732,113 (“Schmidl”) titled, Timing and Frequency Synchronization of OFDM Signals, issued on March 24, 1998
Exhibit-1009	U.S. Patent No. 5,940,450 (“Koslov”) titled, Carrier Recovery Method and Apparatus, issued on August 17, 1999
Exhibit-1010	P. Robertson and S. Kaiser, <i>Analysis of the Effect of Phase-Noise in Orthogonal Frequency Division Multiplex (OFDM) Systems</i> , IEEE Xplore, February 1995 (“Robertson”)

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Exhibit-1011	P. H. Moose, <i>A Technique for Orthogonal Frequency Division Multiplexing Frequency Offset Correction</i> , IEEE Transactions on Communications, vol. 42, No. 10, October 1994 (“Moose 1994”)
Exhibit-1012	B. P. Lathi, <i>Modern Digital and Analog Communication Systems</i> , The Dryden Press, Saunders College Publishing, 2nd Ed., 1989 (“Lathi”)
Exhibit-1013	J. G. Proakis, <i>Digital Communications</i> , McGraw Hill, Inc., 2nd Ed. 1989, (“Proakis”)
Exhibit-1014	W. Zou and Y. Wu, <i>COFDM: An Overview</i> , IEEE Transactions on Broadcasting, Vol. 41, No. 1, March 1995 (“Zou”)
Exhibit-1015	P. H. Moose, <i>Differentially Coded Multi-Frequency Modulation for Digital Communications</i> , Signal Processing V: Theories and Applications, Proceedings of EUSIPCO-90, September 18-21, 1990
Exhibit-1016	U.S. Patent No. 5,444,697 (the “697 Patent”) titled, Method and Apparatus for Frame Synchronization in Mobile OFDM Data Communication, issued on August 22, 1995
Exhibit-1017	IEEE Xplore web archive denoting, P. H. Moose, Differential Modulation and Demodulation of Multi-Frequency Digital Communications Signals, IEEE, pp. 273-77, 1990 (“Moose 1990”), available at http://ieeexplore.ieee.org/document/117428/
Exhibit-1018	Declaration of Patrick L. Donnelly, dated June 28, 2018
Exhibit-1019	December 7, 2018 E-mail Correspondence Among Counsel for the Parties and the Board
Exhibit-1020	January 2019 E-mail Correspondence Among Counsel for the Parties and the Board
Exhibit-1021	February 2019 E-mail Correspondence Among Counsel for the Parties and the Board

EXHIBIT No.	DESCRIPTION
Exhibit-1022	April 2019 E-mail Correspondence Among Counsel for the Parties and the Board

CERTIFICATE OF SERVICE

Pursuant to 37 C.F.R. § 42.6(e), the undersigned certifies that a true and correct copy of the foregoing Petitioner's Exhibit List was served on May 6, 2019, by filing this document through the PTAB E2E System as well as delivering via electronic mail upon the following counsel of record for Patent Owner:

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