

UNITED STATES PATENT AND TRADEMARK OFFICE

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BEFORE THE PATENT TRIAL AND APPEAL BOARD

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SIRIUS XM RADIO INC.,  
Petitioner,

v.

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

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Case No. Not Yet Assigned  
Patent No. 7,061,997

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**DECLARATION OF DR. DAVID LYON IN SUPPORT OF PETITION  
FOR *INTER PARTES* REVIEW OF U.S. PATENT NO. 7,061,997**

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**PETITIONER'S EXHIBIT LIST**

<b>EXHIBIT NO.</b>	<b>DESCRIPTION</b>
<b>Exhibit-1001</b>	Declaration of David Lyon, Ph.D., in support of Petition for <i>Inter Partes Review</i> of U.S. Patent 7,061,997, dated February 21, 2018
<b>Exhibit-1002</b>	U.S. Patent No. 6,341,123 to Tsujishita (“Tsujishita”) titled, Digital Audio Broadcasting Receiver, issued on January 22, 2002
<b>Exhibit-1003</b>	Classen et al., <i>Frequency Synchronization Algorithms for OFDM Systems Suitable for Communication over Frequency Selective Fading Channels</i> , IEEE 44th Conf. (Vehicular Technology Conference), June 8-10, 1994 (“Classen”)
<b>Exhibit-1004</b>	U.S. Patent No. 5,345,440 (“Gledhill”) titled, Reception of Orthogonal Frequency Division Multiplexed Signals, issued on September 6, 1994
<b>Exhibit-1005</b>	Prosecution History of U.S. Patent No. 7,061,997 (excerpts)
<b>Exhibit-1006</b>	Moose, <i>Differential Modulation And Demodulation Of Multi-Frequency Digital Communications Signals</i> , IEEE, 1990 (“Moose 1990”)
<b>Exhibit-1007</b>	U.S. Patent No. 7,061,997 (the “997 Patent”) titled, Method and Apparatus for Fine Frequency Synchronization in Multi-Carrier Demodulation Systems, issued on June 13, 2006
<b>Exhibit-1008</b>	IEEE Xplore web archive denoting, P. H. Moose, <i>Differential Modulation and Demodulation of Multi-Frequency Digital Communications Signals</i> , IEEE, pp. 273-77, 1990 (“Moose 1990”), available at <a href="http://ieeexplore.ieee.org/document/117428/">http://ieeexplore.ieee.org/document/117428/</a>
<b>Exhibit-1009</b>	IEEE Xplore web archive denoting, Classen et al., <i>Frequency Synchronization Algorithms for OFDM Systems Suitable for Communication over Frequency Selective Fading Channels</i> , IEEE 44th Conf. (Vehicular Technology Conference), June 8-10, 1994 (“Classen”), available at <a href="http://ieeexplore.ieee.org/document/345377/">http://ieeexplore.ieee.org/document/345377/</a>
<b>Exhibit-1021</b>	J. G. Proakis, <i>Digital Communications</i> , McGraw Hill, Inc., 2nd Ed. 1989, Sec. 3.1.1, pp. 149-151 (“Proakis”)

EXHIBIT NO.	DESCRIPTION
<b>Exhibit-1022</b>	B. P. Lathi, <i>Modern Digital and Analog Communication Systems</i> , The Dryden Press, Saunders College Publishing, 2nd Ed., pp. 12-13, 1989 (“Lathi”)
<b>Exhibit-1023</b>	W. Zou and Y. Wu, <i>COFDM: An Overview</i> , IEEE Transactions on Broadcasting, Vol. 41, No. 1, pp. 1-8, March 1995 (“Zou”)

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