

UNITED STATES PATENT AND TRADEMARK OFFICE

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BEFORE THE PATENT TRIAL AND APPEAL BOARD

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SLING TV L.L.C., SLING MEDIA, L.L.C.,  
DISH NETWORK L.L.C., DISH TECHNOLOGIES L.L.C.  
Petitioners

v.

REALTIME ADAPTIVE STREAMING LLC,  
Patent Owner.

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Case IPR2018-01342  
Patent 8,934,535 B2

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**DECLARATION OF KENNETH A. ZEGER, PH.D., IN SUPPORT OF  
PATENT OWNER'S RESPONSE**

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**EXHIBIT LIST**

<b>Exhibit No.<sup>1</sup></b>	<b>Description</b>
<b>1001</b>	U.S. Patent No. 8,934,535 to Fallon (“the ’535 Patent”)
<b>1002</b>	Prosecution History of the ’535 Patent (“the Prosecution History”)
<b>1003</b>	Declaration of Dr. Scott Acton
<b>1004</b>	U.S. Patent No. 6,557,001 (“Dvir”)
<b>1005</b>	U.S. Patent No. 5,675,789 (“Ishii”)
<b>1006</b>	U.S. Patent No. 6,216,157 (“Vishwanath”)
<b>1007</b>	Prosecution History of U.S. Patent No. 8,867,610 to Fallon (“the ’610 Patent”)
<b>1008</b>	U.S. Patent No. 6,195,024 to Fallon (“the ’024 Patent”)
<b>1009</b>	<i>Realtime Data LLC v. Rackspace US, Inc. et al.</i> , Dkt. No. 183, Case No. 6-16-cv-00961 (E.D. Tex. June 29, 2016)
<b>1010</b>	<i>Realtime Data LLC v. Actian Corporation et al.</i> , Dkt. No. 362, Case No. 6-15-cv-00463 (E.D. Tex. May 8, 2015)
<b>1011</b>	Infringement Contentions for U.S. Patent No. 8,934,535 from <i>Realtime Adaptive Streaming LLC v. Sling TV L.L.C. et al.</i> , Case No. 1:17-cv-02097-RBJ (D. Colo.)
<b>1012</b>	<i>Realtime Data, LLC d/b/a IXO v. Packeteer Inc., et al.</i> , No. 6:08-cv-00144 Docket No. 371, p. 59 (E.D. Tex. June 22, 2009)
<b>1013</b>	Held, G. <i>Data Compression: Techniques and Applications, Hardware and Software Considerations</i> , John Wiley & Sons, 1983
<b>1014</b>	Fahie, John Jacob (1884). <i>A History of Electric Telegraphy, to the Year 1837</i> . E. & F.N. Spon.
<b>1015</b>	Mag, Lond Mechanics. “ <i>Mr. Bain’s Electric Printing Telegraph.</i> ” Journal of the Franklin Institute, of the State of Pennsylvania, for the Promotion of the Mechanic Arts; Devoted to Mechanical and Physical Science, Civil Engineering, the Arts and Manufactures, and the Recording of American and Other Patent Inventions (1828-1851) 8.1 (1844): 61.

<sup>1</sup> Exhibits 1001–1025 were submitted with the Petition and labeled “DISH1001” to “DISH1022.” Exhibits 2001–2009 were submitted with Patent Owner’s Preliminary Response. Exhibits 2010–2016 are submitted with Patent Owner’s Response.

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