#### UNITED STATES PATENT AND TRADEMARK OFFICE

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### BEFORE THE PATENT TRIAL AND APPEAL BOARD

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ARRIS GROUP, INC.
Petitioner

v.

TQ DELTA, LLC Patent Owner

Case: IPR2016-01160 Patent 8,611,404

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Before SALLY C. MEDLEY, KALYAN K. DESHPANDE, and TREVOR M. JEFFERSON, *Administrative Patent Judges* 

PETITIONER'S REPLY TO PATENT OWNER'S RESPONSE



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## **PETITIONER'S EXHIBIT LIST**

Ex. No.	Brief Description	
1001	U.S. Patent No. 8,612,404 to Greszczuk, et. al. ("404 Patent")	
1002	U.S. Provisional S/N: 60/072,447, "A Multicarrier Transmission	
	System with a Low Power Sleep Mode and with Instant-On	
	Capability," filed Jan. 26, 1998.	
1003	Declaration of Lance McNally.	
1004	Curriculum Vitae of Lance McNally.	
1005	U.S. Patent No. 5,956,323 to Bowie. ("Bowie")	
1006	U.S. Patent No. 6,246,725 to Vanzieleghem et al. ("Vanzieleghem")	
1007	T1E1.4/97-161R1, "Warm Re-Start for ADSL", Werner Henkel, Peter	
1007	S. Chow, September 22-26, 1997 T1E1.4 Working Group Meeting.	
	("97-161R1")	
1008	T1E1.4/97-319, "Power Down in Multicarrier Transmission", Thierry	
	Pollet, Peter Reusens, September 22-26, 1997 T1E1.4 Working Group	
	Meeting. ("97-319")	
1009	ANSI T1.413-1995 – Network and Customer Installation Interfaces –	
	Asymmetric Digital Subscriber Line (ADSL) Metallic Interface (Aug.	
	18, 1995). ("1995 ADSL Standard")	
1010	Accredited Standards Committee T1 – Telecommunications,	
	Procedures Manual, Tenth Issue, Year End 1995.	
1011	T1E1.4/97-362 Meeting Report of September 22-25 WG meeting in	
	Minneapolis, MN - Uploaded to T1 FTP Server on Nov. 12, 1997.	
1012	T1E1.4/97-463 Meeting Report, including Meeting Attendance Log from September 1997 Meeting.	
1013	Harry Newton, <i>Newton's Telecom Dictionary</i> (8 <sup>th</sup> ed. 1994).	
1013	Alliance for Telecommunications Industry Solutions (ATIS) (Susan	
1014	M. Miller) response to: In the Matter of Implementation of Section	
	273 of the Communications Act of 1934 as amended by the	
	Telecommunications Act of 1996, CC Docket No. 96-254, Feb. 24,	
	1997.	
1015	Aware, Inc., Annual Report (Form 10-K) (January 27, 1998).	
1016	Internet Archive Capture of T1E1.4 Uploaded 1997 Contributions,	
	Jan. 30, 1998	
	(http://web.archive.org/web/19980130071451/http:/t1.org/index/0312.	
	htm).	
1017	U.S. Provisional Application No. 60/052,140 (July 10, 1997).	



Ex. No.	Brief Description	
1018	Procedures for the Development and Coordination of American	
	National Standards, American National Standards Institute, March 1997.	
1019	<ul> <li>Non-Final Office Action mailed July 24, 2003 for Application No. 09/563,527 (issued as U.S. Patent 6,845,103) that cites ANSI T1.413-1995 as a prior art reference under 35 U.S.C. 103(a).</li> <li>This Supplemental Exhibit has been served to Patent Owner but has not been filed.</li> </ul>	



## **TABLE OF AUTHORITIES**

## **CASES**

Hill-Rom Servs., Inc. v. Stryker Corp. 755 F.3d 1367, 1371 (Fed. Cir. 2014)	10
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KSR Int'l Co. v. Teleflex Inc. 550 U.S. 398, 417 (2007)	24
STATUTES	
35 U.S.C. §103(a)	1, 24
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