

UNITED STATES PATENT AND TRADEMARK OFFICE

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BEFORE THE PATENT TRIAL AND APPEAL BOARD

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Ericsson Inc.

Petitioner

v.

Electronics and Telecommunications Research Institute

Patent Owner

Patent No. 8,320,337 B2  
Filing Date: January 5, 2010  
Issue Date: November 27, 2012

Title: METHOD AND APPARATUS FOR TRANSMITTING ACK/NACK

*Inter Partes* Review No. IPR2019-00237

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**PETITION FOR *INTER PARTES* REVIEW  
UNDER 35 U.S.C. §§ 311-319 AND 37 C.F.R. § 42.100 *ET SEQ.***

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### Petitioner's Table of Exhibits

Exhibit No.	Description
1001	U.S. Patent No. 8,320,337 (“the ’337 Patent”)
1002	Prosecution File History of U.S. Patent No. 8,320,337 (“’337 File History”)
1003	Declaration of Alexander Haimovich, Ph.D. under 37 C.F.R. § 1.68
1004	Curriculum Vitae of Alexander Haimovich, Ph.D.
1005	Complaint filed December 3, 2018 in <i>Sol IP, LLC v. AT&amp;T Mobility LLC</i> , Civil Action No. 2:18-cv-00826 (E.D. Tex.)
1006	U.S. Patent No. 8,531,962
1007	3rd Generation Partnership Project; Technical Specification Group Radio Access Network; Evolved Universal Terrestrial Radio Access (E-UTRA); Physical Channels and Modulation (Release 8), 3GPP TS 36.211 V8.4.0 (2008-09) (“36.211 V8.4.0”)
1008	3rd Generation Partnership Project; Technical Specification Group Radio Access Network; Evolved Universal Terrestrial Radio Access (E-UTRA); Physical layer procedures (Release 8), 3GPP TS 36.213 V8.4.0 (2008-09) (“36.213 V8.4.0”)
1009	LG Electronics, “Issues with PHICH Modifier,” 3GPP TSG RAN WG1 Meeting #53bis in Warsaw, Poland, June 30 ~ July 4, 2008, R1-082439
1010	Qualcomm Europe, “Mapping of PHICH Resources from PUSCH and DM-RS Transmission,” 3GPP TSG RAN WG1 Meeting # 53 in Kansas City, USA, May 5-9, R1-081961 (“Qualcomm-1”)
1011	3rd Generation Partnership Project; Technical Specification Group Radio Access Network; Evolved Universal Terrestrial Radio Access (E-UTRA); Physical Channels and Modulation (Release 8), 3GPP TS 36.211 V8.3.0 (2008-05)
1012	3rd Generation Partnership Project; Technical Specification Group Radio Access Network; Evolved Universal Terrestrial Radio Access (E-UTRA); Physical layer procedures (Release 8), 3GPP TS 36.213 V8.3.0 (2008-05)
1013	Declaration of Craig Bishop under 37 C.F.R. § 1.68 (“Bishop Decl.”) and related appendices
1014	Motorola, “PDCCH Formats (A) for Scheduling Grants,” 3GPP TSG RAN WG1 Meeting #50bis in Shanghai, China, October 8-12, 2007, R1-074000

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