Filed on behalf of Securus Technologies, Inc.

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UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

GLOBAL TEL*LINK CORPORATION, Petitioner,

v.

SECURUS TECHNOLOGIES, INC., Patent Owner.

Case IPR2016-01362 U.S. Patent No. 9,083,850

DECLARATION OF DR. ALAN C. BOVIK IN SUPPORT OF PATENT OWNER'S RESPONSE TO PETITION

Mail Stop PATENT BOARD Patent Trial and Appeal Board U.S. Patent & Trademark Office P.O. Box 1450 Alexandria, Virginia 22313-1450



Patent Owner Response to Petition for *Inter Partes* Review of U.S. Patent No. 9,083,850

Declaration of Dr. Alan C. Bovik

I, Alan C. Bovik, do hereby declare and state, under penalty of perjury under the laws of the United States of America, that all statements made herein of my own knowledge are true and correct and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code.

Executed on April 24, 2017, at Austin, TX.



Alan C. Bovik

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I. <u>INTRODUCTION</u>

A. Engagement

- 1. My name is Dr. Alan C. Bovik. I have been asked to submit this declaration on behalf of Securus Technologies, Inc. ("Securus" or "Patent Owner") in connection with Patent Owner's response (the "Response") to the petition (the "Petition") of Global Tel*Link Corporation ("GTL" or "Petitioner") for *inter partes* review of U.S. Patent No. 9,083,850 ("the '850 patent"). Securus' Response, I understand, is being submitted to the Patent Trial and Appeal Board ("PTAB" or the "Board") of the United States Patent and Trademark Office ("PTO" or "USPTO") in this proceeding having case number IPR2016-01362.
- 2. I have been retained as a technical expert by Petitioner to study and provide my opinions on the technology claimed in, and the patentability or nonpatentability of, claims 1-21 of the '850 patent.
- 3. As part of my study, I have reviewed and am familiar with the specification of the '850 patent. I understand that the '850 patent has been provided as Exhibit 1001. Previously, Patent Owner filed its Preliminary Response (Paper 9, referred to as the "Preliminary Response") to the Petition (Paper 2, referred to as the "Petition"). And the Board issued its Decision (Paper 11, referred to and cited to as the "Decision"), which instituted review based on the finding that there was a



reasonable likelihood that the Petitioner would prevail as to all claims 1-21 of the '850 patent.

B. Background and Qualifications

- 4. I expect to testify regarding my background, qualifications, and experience relevant to the issues in this *inter partes* review proceeding. I hold a Ph.D. in Electrical and Computer Engineering from the University of Illinois, Urbana-Champaign (awarded in 1984). I also hold a Master's degree in Electrical and Computer Engineering from the University of Illinois, Urbana-Champaign (awarded in 1982).
- 5. I am a tenured full Professor and I hold the Cockrell Family Regents Endowed Chair at the University of Texas at Austin. My appointments are in the Department of Electrical and Computer Engineering, the Department of Computer Sciences, and the Department of Biomedical Engineering. I am also the Director of the Laboratory for Image and Video Engineering ("LIVE").
- 6. My research is in the general area of digital television, digital cameras, image and video processing, computational neuroscience, and modeling of biological visual perception. I have published over 800 technical articles in these areas and hold seven U.S. patents. I am also the author of The Handbook of Image and Video Processing, Second Edition (Elsevier Academic Press, 2005); Modern Image Quality Assessment (Morgan & Claypool, 2006); The Essential Guide to



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