

Filed on behalf of: Samsung Electronics Co., Ltd. and
Samsung Electronics America, Inc.

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UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

SAMSUNG ELECTRONICS CO., LTD. and
SAMSUNG ELECTRONICS AMERICA, INC.
Petitioner

v.

E-WATCH, INC.
Patent Owner

Patent No. 7,365,871

DECLARATION OF DR. ALAN BOVIK

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I, Alan Bovik, declare as follows:

I. Introduction

1. I have been retained by Samsung Electronics Co., Ltd. and Samsung Electronics America, Inc. (collectively “Petitioner”) as an independent expert consultant in this proceeding before the United States Patent and Trademark Office (“PTO”) regarding U.S. Patent No. 7,365,871 (“the ’871 patent”) (Ex. 1001), which I understand is owned by e-Watch, Inc. (“Patent Owner”). I have been asked to consider the ’871 patent and whether certain references disclose or suggest the features recited in claims 9-11 of the ’871 patent. My opinions are set forth below.

2. Although I am being compensated at my rate of \$500 per hour for the time I spend on this matter, no part of my compensation is dependent on the outcome of this proceeding or any other proceeding involving the ’871 patent or any related patent. Nor do I have any other interest in this proceeding or any other proceeding involving the ’871 patent or any related patent.

II. Qualifications

3. I received a B.S. degree in Computer Engineering in 1980, a M.S. degree in Electrical and Computer Engineering in 1982, and a Ph.D. degree in Electrical and Computer Engineering in 1984, all from the University of Illinois, Urbana-Champaign.

4. I am currently a tenured full Professor and hold the Cockrell Family Regents Endowed Chair in Engineering at The University of Texas at Austin. My appointments at The University of Texas 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”).

5. My research is in the general area of image and video processing, computational vision, digital microscopy, and modeling of biological visual perception. I have published over 700 technical articles in these areas and hold four 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 Image Processing* (Elsevier Academic Press, 2009); and *The Essential Guide to Video Processing* (Elsevier Academic Press, 2009); as well as numerous other publications.

6. Among other awards and honors, I received the 2013 IEEE Signal Processing Society’s “Society Award,” which is the highest honor given by the Society, “[f]or fundamental contributions to digital image processing theory, technology, leadership and education”; the Technical Achievement Award of the IEEE Signal Processing Society in 2005, which is the highest technical honor

given by the Society, for “Broad and Lasting Contributions to the Field of Digital Image Processing”; and the Education Award of the IEEE Signal Processing Society in 2008, which is the highest education honor given by the Society, for “Broad and Lasting Contributions to Image Processing, including popular and important image processing books, innovative on-line courseware, and for the creation of the leading research and educational journal and conference in the image processing field.”

7. My technical articles have been widely recognized as well. For example, I received the 2009 IEEE Signal Processing Society Best Paper Award for a paper titled, “Image quality assessment: From error visibility to structural similarity,” published in IEEE Transactions on Image Processing, volume 13, number 4, April 2004; and the 2013 Best Magazine Paper Award for a paper titled, “Mean squared error: Love it or leave it? — A new look at signal fidelity measures,” published in IEEE Transactions on Image Processing, volume 26, number 1, January 2009.

8. I have also been honored by other technical organizations, including the Society for Photo-optical and Instrumentation Engineers (SPIE), from which I received the Technology Achievement Award in 2013 “[f]or Broad and Lasting Contributions to the Field of Perception-Based Image Processing”; and the Society for Imaging Science and Technology, which accorded me Honorary Membership,

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