

UNITED STATES PATENT AND TRADEMARK OFFICE

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**BEFORE THE PATENT TRIAL AND APPEAL BOARD**

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LG ELECTRONICS, INC.  
Petitioner

v.

ATI TECHNOLOGIES ULC  
Patent Owner

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**Case: IPR2015-00321**

**Patent 7,095,945**

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**DECLARATION OF DAN SCHONFELD, PHD**

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## **I. INTRODUCTION**

1. My name is Dan Schonfeld, and I have been retained by the law firm of Mayer Brown LLP on behalf of LG Electronics, Inc. as an expert in the relevant art.

2. I have been asked to provide my opinions and views on the materials I have reviewed in this case related to Ex. 1001, U.S. Patent No. 7,095,945 (“the ’945 Patent”) (“the patent-at-issue”), and the scientific and technical knowledge regarding the same subject matter before and for a period following the date of the first application for the patent-at-issue was filed.

3. I am being compensated for my work on this case at my standard consulting rate of \$500 per hour. I am also being reimbursed for all incurred expenses. My compensation has not influenced any of my opinions in this matter and does not depend on the outcome of this proceeding or any issue in it.

4. My opinion and underlying reasoning for this opinion is set forth below.

### **A. Background And Qualifications**

5. I am currently a Professor in the Department of Electrical and Computer Engineering at the University of Illinois at Chicago. I have been elected Fellow of the Institute of Electrical and Electronics Engineers (“IEEE”) as well as Fellow of the International Society for Optics and Photonics (“SPIE”). I have also been elected University Scholar of the University of Illinois. A complete list of my publications, professional activities, and honors that I have received is fully set forth in my curriculum vitae, attached hereto as Appendix A.

6. I received my B.S. degree in Electrical Engineering and Computer Science from the University of California, Berkeley, California, and my M.S. and Ph.D. degrees in Electrical and Computer Engineering from The Johns Hopkins University, Baltimore, Maryland, in 1986, 1988, and 1990, respectively.

7. In August 1990, I joined the Department of Electrical Engineering and Computer Science at the University of Illinois, Chicago, Illinois, where I am currently a Professor in the Departments of Electrical and Computer Engineering, Computer Science, and Bioengineering. I serve as Co-Director of the Multimedia Communications Laboratory (“MCL”) and member of the Signal and Image Research Laboratory (“SIRL”). I have also served as Director of the University-Industry Engineering Research Center (“UIERC”), formerly known as the Manufacturing Research Center (“MRC”), in the College of Engineering.

8. I currently serve as Editor-in-Chief of the IEEE Transactions on Circuits and Systems for Video Technology. I have previously served as Deputy Editor-in-Chief of the IEEE Transactions on Circuits and Systems for Video Technology and Area Editor for special issues of the IEEE Signal Processing Magazine. I have also served as Associate Editor of the IEEE Transactions on Circuits and Systems for Video Technology, IEEE Transactions on Image Processing, and IEEE Transactions on Signal Processing. I also served on the editorial board of the IEEE Signal Processing Magazine, EURASIP Journal of Image and Video Processing, and Research Letters in Signal Processing. I have served as guest editor of numerous special issues in various

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