

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: IPR2015-01620**

**Patent 7,095,945**

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**SUPPLEMENTAL DECLARATION OF DAN SCHONFELD, PHD**

## Table of Contents

A.	Background And Qualifications .....	2
B.	Information Considered .....	6
<b>I.</b>	<b>LEGAL STANDARDS .....</b>	<b>6</b>
A.	Person Of Ordinary Skill In The Art.....	7
B.	Anticipation.....	8
C.	Obviousness .....	9
D.	Claim Construction .....	11
<b>II.</b>	<b>TECHNOLOGY BACKGROUND.....</b>	<b>12</b>
A.	Multiplexers and Demultiplexers.....	12
B.	Packetized Data.....	14
C.	MPEG Streams.....	14
1.	MPEG Program Stream (PS) .....	16
2.	MPEG-2 Transport Stream (TS) .....	18
D.	Time Shifting .....	19
E.	Clock Recovery And Timing Information.....	20
F.	Coded Multimedia Data And Timing Information .....	21
G.	Real-Time Applications .....	22
<b>III.</b>	<b>THE '945 PATENT .....</b>	<b>23</b>
A.	Background Of The '945 Patent .....	23
B.	Prosecution History (Ex. 1002).....	26
C.	Challenged Claims .....	29
D.	Claim Construction .....	29
<b>IV.</b>	<b>PRIOR ART ANALYSIS .....</b>	<b>29</b>
A.	U.S. Patent No. 6,397,000 (“Hatanaka”) .....	29
1.	Claim 21 Is Obvious Over Hatanaka In View Of Hoogenboom .....	32
2.	Claim 21 Is Obvious Over Hatanaka In View Of Anderson .....	58
<b>V.</b>	<b>SUPPLEMENTATION .....</b>	<b>67</b>

## **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 journals in the area of multimedia systems.

9. I currently serve as Technical Program Chair of the IEEE International Conference on Acoustics, Speech, and Signal Processing (ICASSP) 2018. I have served as General Co-Chair of the IEEE International Conference on Multimedia and Expo (ICME) 2012. I have also served as Chair of the IEEE Workshop on Video Mining 2008 and the SPIE Conference on Visual Communication and Image Processing 2007. I have also served on the organizing committees of various conferences including the IEEE International Conference on Image Processing 1998 and 2012.

10. I have authored and co-authored over 200 technical papers for various journals and conferences. I was co-author (with Carlo Giulietti and Rashid Ansari) of a paper that won the Best Paper Award at the ACM Multimedia Workshop on Advanced Video Streaming Techniques for Peer-to-Peer Networks and Social Networking 2010. I was also co-author (with Junlan Yang) of a paper that won the Best Student Paper Award at the IEEE International Conference on Image Processing 2007. I was also co-author (with Wei Qu) of a paper that won the Best Student Paper Award at the IEEE International Conference on Image

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