IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re *Inter Partes* Review of:	)
U.S. Patent No. 7,907,137	)
Issued: March 15, 2011	)
Application No.: 11/391,941	)
	)

For: **Active matrix drive circuit**

DECLARATION OF MILTIADIS HATALIS, PH.D. IN SUPPORT OF PETITION FOR INTER PARTES REVIEW OF U.S. PATENT NO. 7,907,137

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CONTENTS

I. INTRODUCTION 1

II. BACKGROUND AND QUALIFICATIONS 1

III. DOCUMENTS CONSIDERED IN FORMING MY OPINIONS 8

IV. UNDERSTANDING OF LEGAL PRINCIPLES 9

V. BACKGROUND 14

A. Technology Background 14

1. Active Matrix OLED Displays 14

2. Thin Film Transistors 17

3. Drive Circuits In Active Matrix Displays 25

B. The '137 Patent 30

1. The '137 Patent's Display Apparatus 31

a. Threshold Voltage Detection 32

b. Compensation Voltage Application 34

c. Supplying Gradation Current 35

d. Light Emission 38

2. The Challenged Claims 39

3. Prosecution History 42

VI. CLAIM CONSTRUCTION 46

VII. CLAIMS 1, 10-11 AND 36-37 ARE UNPATENTABLE OVER MIYAZAWA ALONE OR IN VIEW OF CHILDS 50

1. Miyazawa (Ex. 1005) 50

2. Childs (Ex. 1006) 61

A. Independent Claim 10 Is Unpatentable over Miyazawa Alone or with Childs. 66

1. Preamble: operation of the display drive apparatus 67

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2. [a] Threshold voltage detection circuit 72
3. [b] Compensation voltage application circuit 94
4. [c] Gradation signal generation circuit 101
B. Independent Claim 36 Is Unpatentable over Miyazawa Alone or with Childs. 108
C. Independent Claim 1 Is Unpatentable over Miyazawa, Alone or with Childs 111
D. Dependent Claims 11 and 37 Are Unpatentable over Miyazawa Alone or with Childs. 115
1. Claim 11 115
2. Claim 37 118
II. DEPENDENT CLAIMS 9, 15 AND 39 ARE UNPATENTABLE OVER MIYAZAWA, ALONE OR WITH CHILDS, AND KASAI. 119
A. Overview of Claims 9, 15 and 39 119
B. Overview of Kasai (Ex. 1007) 123
C. Claims 9, 15 and 39 Are Unpatentable Over Miyazawa, Alone Or With Childs, and Kasai. 130
III. CONCLUSION 137

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I. INTRODUCTION

1. I have been retained as an independent expert witness on behalf of LG Display Co., Ltd. ("LG Display" or "Petitioner") in the above-captioned *inter partes* review ("IPR") relating to U.S. Patent No. 7,907,137 ("'137 patent") (Ex. 1001).

2. I understand that LG Display is petitioning for IPR of claims 1, 10, 11, 15, 36, 37 and 39 of the '137 patent and requests that the United States Patent and Trademark Office ("PTO") cancel those claims.

3. In preparing this Declaration, I have reviewed the '137 patent, and considered the documents identified in Section III in light of the general knowledge in the relevant art. In forming my opinions, I relied upon my education, knowledge, and experience, and considered the level of ordinary skill in the art as discussed below.

4. I am being compensated for my work in this matter at my standard consulting rate, which is $400 per hour, plus actual expenses. My compensation is not dependent in any way upon the outcome of this matter.

II. BACKGROUND AND QUALIFICATIONS

5. My complete qualifications and professional experience are described in my academic curriculum vitae, a copy of which is provided as **Exhibit 1004**. The following is a brief summary of my relevant qualifications and professional experience.

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6. I am currently a Professor in the Department of Electrical and Computer Engineering at Lehigh University. I hold a B.S. degree in physics from Aristotle University, Greece, an M.S. degree in electrical engineering from SUNY Buffalo, and a Ph.D. (1987) in electrical engineering from Carnegie Mellon University. In 1987, I joined Lehigh University as an assistant professor in the Department of Electrical & Computer Engineering. I served as an associate professor at Lehigh University from 1991 to 1995, and have been a full professor at Lehigh University since 1995. From 1988 to 1993, I served as associate director of the Microelectronics Research Laboratory at Lehigh University. Since 1992, I have served as director of the Display Research Laboratory at Lehigh University. From 2010 to 2013, I served as interim director of the Sherman Fairchild Center for Solid State Studies at Lehigh University. From 2003 to 2008, I concurrently served as professor in the Department of Computer Science at Aristotle University, Greece.

7. From 1987 to 2015, I also worked as an independent consultant for a number of major technology companies in the flat panel display and semiconductor field, including IBM, Kodak, Sharp and Motorola Solutions. In 1992, I was a visiting scientist at XEROX Palo Alto Research Laboratory.

8. As discussed below, my technical expertise is in flat panel display technologies, including thin film transistor ("TFT") and active-matrix organic light-emitting diode ("AMOLED") technologies.

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