UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

APPLE INC.,

Petitioner,

v.

ANDREA ELECTRONICS INC.,

Patent Owner.

Patent No. 6,363,345
Issued: March 26, 2002
Filed: February 18, 1999

Inventors: Joseph Marash, *et al.*
Titles: SYSTEM, METHOD, AND APPARATUS FOR CANCELLING NOISE

IPR2017-00626

DECLARATION OF BERTRAND HOCHWALD REGARDING U.S. PATENT NO. 6,363,345

Petitioner Apple Inc.

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I. INTRODUCTION

A. Engagement

1. I have been retained by counsel for Apple Inc. as an expert witness in the above-captioned proceeding. I have been asked to provide an opinion regarding the patentability of certain claims in U.S. Patent No. 6,363,345 ("the '345 Patent") (Exhibit 1001). I have been asked to provide a discussion of the meaning of certain words and phrases in the claims of the '345 patent, to provide a description of state of the art of the technology described in the '345 patent, and to analyze various references that I understand are prior art to these patents.

B. Background and Qualifications

2. In 1995 I received a Ph.D. in Electrical Engineering from Yale University. My PhD work involved the analysis and processing of electromagnetic and audio signals for the estimation of the location of electromagnetic and audio sources. In 1993 I received an M.A. in Statistics from Yale University. My primary area of study was Statistical Signal Processing. I received an M.S. in Electrical Engineering from Duke University in 1986, and a B.S. in Engineering from Swarthmore College in 1984.

3. I have twenty years of combined industry and academic experience in the research and design of systems for signal processing, and wireless and wireline communications.

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