

**UNITED STATES PATENT AND TRADEMARK OFFICE**

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**BEFORE THE PATENT TRIAL AND APPEAL BOARD**

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ZTE Corporation and ZTE (USA) Inc.  
Petitioner

v.

Hitachi Maxell, Ltd.  
Patent Owner

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*INTER PARTES* REVIEW OF U.S. PATENT NO. 6,748,317  
Case IPR No.: *To Be Assigned*

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DECLARATION OF DR. SCOTT ANDREWS

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## I. INTRODUCTION

1. I have been retained by counsel for ZTE Corporation and ZTE (USA) Inc. (“ZTE” or “Petitioner”), and asked to review and provide my opinion on the patentability of claims 1-3, 6-8, 10, 15-17, and 20 (“the challenged claims”) of U.S. Patent No. 6,748,317. (EX1001, “317 Patent”). This declaration accompanies the petition for *inter partes* review of the ‘317 Patent (“Petition”).

2. I am being compensated at an hourly consulting rate for time actually spent reviewing materials and performing my analysis of the technical issues relevant to this matter. My compensation is not contingent on the outcome of this proceeding or the content of my opinions.

## II. BACKGROUND

3. I have over 30 years of professional experience in the field of automotive technologies and systems, including vehicle information systems and vehicle safety and control systems. Further, I have authored numerous published technical papers and am a named inventor on 11 U.S. and foreign patents.

4. I received a Bachelor of Science degree in Electrical Engineering from University of California, Irvine in 1977 and a Master of Science degree in Electronic Engineering from Stanford University in 1982.

5. From 1977 to 1979, I worked at Ford Aerospace where I designed, tested and delivered microwave radar receiver systems.

6. From 1979 to 1983, I worked at Teledyne Microwave, where I developed high reliability microwave components and developed CAD tools.

7. From 1983 to 1996, I worked at TRW, Inc., having held various positions. From 1983 to 1985, I was a Member of the technical staff and a Department Manager in the Space Electronics sector. Between 1985 and 1990 I was a project manager working on various communications systems projects including the US DoD Advanced Research Projects Administration (ARPA) MIMIC Program. Between 1990 and 1993 I was the Manager of MMIC (monolithic-microwave-integrated-circuit) Products Organization. In this role, I developed business strategy and managed customer and R&D programs. During this time, I also developed the first single chip 94 GHz Radar, used for automotive cruise control and anti-collision systems. In 1993, I transferred to the TRW Automotive Electronics Group, and managed about 30 engineers in the Systems Engineering and Advanced Product Development organization. In this role, I managed advanced development programs such as automotive radar, adaptive cruise control, occupant sensing, automatic crash notification systems, in-vehicle information systems, and other emerging transportation products.

8. During this time, I also worked with various types of accelerometers. For example, I developed a system that sampled the acceleration signal over time, and applied this time series of samples as inputs to a neural network. We then

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