UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

ZTE (USA) Inc., Samsung Electronics Co., Ltd., and Samsung Electronics America, Inc.,

Petitioner

v.

Fundamental Innovation Systems International LLC,

Patent Owner

DECLARATION OF JAMES T. GEIER

Case No. IPR2018-00110



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I. Introduction

- 1. My name is James T. Geier. I submit this declaration on behalf of ZTE (USA) Inc., Samsung Electronics Co., Ltd., and Samsung Electronics America, Inc. ("Petitioner"), which I understand are challenging the validity of claims 1-18 ("the challenged claims") of U.S. Patent No. 8,624,550 ("the 550 patent") in a petition for inter partes review.
- 2. I have been asked to provide an opinion on the validity of the challenged claims. In my opinion, U.S. Patent No. 7,360,004 ("Dougherty") anticipates claims 1-3, 9-12, and 18 of the '550 patent, and the combination of Dougherty and U.S. Patent No. 6,625,738 ("Shiga") renders obvious claims 4-8 and 13-17 of the '550 patent.

II. Background/Qualifications

- 3. Appendix A to this declaration is my curriculum vitae, which sets forth my qualifications.
- 4. I received a B.S. degree in Electrical Engineering from California
 State University in 1985. In 1990, I received an M.S. degree in Electrical
 Engineering from the Air Force Institute of Technology.
- 5. I have 30 years' experience in the communications industry designing, analyzing, and implementing communications systems, wireless networks, and mobile devices. I have authored over a dozen books on mobile and wireless topics,



including Designing and Deploying 802.11 Wireless Networks (Cisco Press),
Implementing 802.1X Security Solutions (Wiley), Wireless Networking Handbook
(New Riders) and Network Re-engineering (McGraw-Hill). I have been an active
participant within standards organizations, such as the IEEE 802.11 Working
Group and the Wi-Fi Alliance. I have served as Chairman of the IEEE Computer
Society, Dayton Section, and various conferences.

6. I have significant experience with USB, which includes reviewing and analyzing USB specifications and designing and integrating corresponding USB interfaces within various applications. Since 1998, I have been analyzing the operation and limitations of USB in relation to mobile devices that I have designed. For example, during 1998-1999, I analyzed and tested the integration of USB into Monarch Marking Systems bar code scanners and printers. Also, during 2008-2009, I integrated USB into a microcontroller-based monitoring and control system, which involved writing software drivers to interface the microcontroller to the functionality of a USB port. In addition, I have analyzed how USB impacts the operation and specifications of many other devices, such as wireless IP phones and patient heart monitors, which I've been part of designing.

III. Documents and Materials Considered

7. Appendix B to this declaration lists materials that I have considered in rendering the opinions that I express in this declaration. In forming my opinions, I



have also relied on my experience and education.

IV. Legal Principles

- 8. I am not an attorney. I offer no opinions on the law. But counsel has informed me of legal standards that apply to the issue of patent validity. I have applied these standards in arriving at my conclusions.
- 9. I understand that in an inter partes review the petitioner has the burden of proving a proposition of unpatentability by a preponderance of the evidence. I understand this standard is different from the standard that applies in a district court, where I understand a challenger bears the burden of proving invalidity by clear and convincing evidence.
- 10. I understand that a patent claim is invalid based on anticipation if a single prior art reference discloses all of the features of that claim, and does so in a way that enables one of ordinary skill in the art to make and use the invention.

 Each of the claim features may be expressly or inherently present in the prior art reference. I understand that if the prior art necessarily functions in accordance with, or includes a claim's feature, then that prior art inherently discloses that feature. I have relied on this understanding in expressing the opinions set forth below.
- 11. I understand that a prior art reference describes the claimed invention if it either expressly or inherently describes each and every feature set forth in the



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