

**UNITED STATES PATENT AND TRADEMARK OFFICE**

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**BEFORE THE PATENT TRIAL AND APPEAL BOARD**

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HUAWEI DEVICE CO., LTD.,  
Petitioner,

v.

FUNDAMENTAL INNOVATION SYSTEMS INTERNATIONAL LLC,  
Patent Owner.

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Case IPR2018-00465  
Patent No. 8,624,550

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**DECLARATION OF ROBERT BARANOWSKI IN SUPPORT OF  
PATENT OWNER PRELIMINARY RESPONSE**

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Patent Trial and Appeal Board  
U.S. Patent and Trademark Office  
P.O. Box 1450  
Alexandria, VA 22313-1450

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## **I. Introduction**

1. My name is Robert Baranowski. I have been asked by Fundamental Innovation Systems International LLC (“Patent Owner”) to explain certain issues related to the technologies involved in U.S. 8,624,550, the technologies described in the cited references, the knowledge of a person of ordinary skill in the art at the time of the invention, and other pertinent facts and opinions regarding IPR2018-00465. My qualifications are summarized below and are addressed more fully in my CV attached as Exhibit 2002.

2. I am currently the President of Left Coast Engineering in Escondido, California, an engineering service company. My position includes consulting work on a variety of power electronics and wireless communications devices. Because most of the products my company works on are portable, we work with battery chargers almost every day.

3. I received a Bachelor of Electrical Engineering Degree from Villanova University in 1990, and a Master of Science in Electrical Engineering Degree from Villanova University in 1991.

4. For the past 26 years, I have been involved in the design and development of electronic devices, and especially digital wireless telecommunications devices. My work has involved the design of integrated circuits that involve power management, battery charging and USB interface for

telecommunications devices. While at Motorola from March 1992 to November 1997, I worked on several telecommunications products that were battery powered and contained internal battery chargers and accessory connectors that brought external power into the device (sometimes referred to as J3). After Motorola, I worked for Sony Electronics from December 1997 to September 1999, also designing telecommunication devices that were battery powered. During the time I was working for Motorola and Sony, USB was starting to be looked at as a possible power source for the internal chargers for telecommunication devices. I was intimately involved in this field during the time of the U.S. 8,624,550.

5. After graduating from Villanova I worked for two cellular handset manufacturers over the course of 8 years before founding the engineering product design company. For the handset manufacturers I performed product design work on various aspects of the cellular handsets, including power supplies, power distribution, battery chargers, battery monitoring, and applying a variety of techniques to reduce battery consumption, decrease battery charge times, and integrate into smaller and smaller spaces available in the cellular handsets.

6. As part of my design work for these handset manufacturers, I was awarded several patents. Throughout my career, I have been the sole or co-inventor on 18 United States patents related to battery chargers, power regulator

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