# 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

Case IPR2018-00111 Patent 8,624,550

**DECLARATION OF MR. STEVEN ROGERS** 

Mail Stop PATENT BOARD Patent Trial and Appeal Board U.S. Patent & Trademark Office P.O. Box 1450 Alexandria, VA 22313-1450



# TABLE OF CONTENTS

|     |   | <u>Page</u> |
|-----|---|-------------|
| 1.  | Current Supplied on the VBUS Pin of the Power Supply System | 3           |
| 11. | Communication between Base Station and Accessories          | 7           |
| Ш.  | Enumeration and Current Supply before Configuration         | 12          |



- 1. My name is Steven Rogers. I am the sole inventor on U.S. Pat. No. 6,556,564 ("Rogers"), which I understand was raised as a prior art reference against U.S. Pat. No. 8,624,550.
- 2. I have experience with the creation of numerous networking, security telephony, and interface products, in a number of areas. I have founded and led several technology-based companies. These include Cryptek, Inc. (secure terminals), Objective Communications, Inc. (video switching), Cetacean Networks, Inc. (advanced routers). and Rivulet Communications, Inc. (real-time video networks).
- 3. I currently serve as the CEO of Centripetal Networks, Inc., which is developing the first strategic technology solution for cyber security. I previously provided analysis and development services for Unisys, American Satellite Corporation, Harris Government Systems, and COMSAT. I earlier served in the USAF, where I worked on new secure communications systems including the AWACS, National Military Command Center, various spacebased systems, and Air Force One.
- 4. I have a Bachelor of Science degree in Electrical Engineering from Virginia Tech. I have over 10 US Patents and my current company has many more patents.
- Over my career, my work has involved various interface designs.
   As a result, I am familiar with many types of network and component



6584333

interfaces, including the USB interface. In fact, I have been familiar with the USB Specifications, Revisions 2.0, since at least April 2000. Additionally, because of my work and my interaction with other engineers and scientists, I am familiar with the general knowledge that a person with a master's degree in electrical engineering, computer science, or a related field, plus 2-3 years of experience with Universal Serial Bus ("USB") might possess in the 2000-2002 time frame.

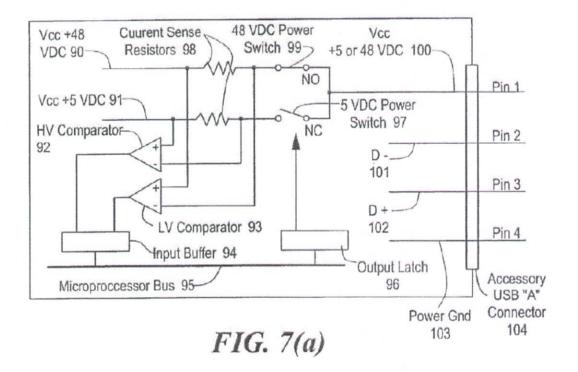
6. I have been asked by Fundamental Innovation Systems

International LLC ("Fundamental") to provide factual background regarding the inventions described in the Rogers patent.

#### I. Current Supplied on the VBUS Pin of the Power Supply System

7. The LAN telephone's power supply system depicted in Figures 6 and 7(a) of the Rogers patent was designed to increase the maximum output voltage but comply with the USB specification's current supply limits. In particular, the LAN telephone would output either 48V or 5V DC power on the VBUS pin (Pin 1) of the USB connector as depicted in Figure 7(a).





- 8. The current on the VBUS pin, however, would need to comply with the current limit for cables and connectors specified in the USB specification. At the time, that limit was a maximum of 500 mA, after device configuration. (By configuration, I mean the last step of the USB bus enumeration step where the host selects a configuration for use by the device. *See* USB 2.0 at 243-244). The combination of a 5V supply, with a 500mA current limit, means that a USB device would be limited to about 2.5 watts.
- 9. As explained in my patent, a USB standardized interface was chosen "for future expansion." Ex. 1005, 10:59-64. In the 2000-2002 time frame, most USB cables used to connect the base station with the accessories



# DOCKET

# Explore Litigation Insights



Docket Alarm provides insights to develop a more informed litigation strategy and the peace of mind of knowing you're on top of things.

## **Real-Time Litigation Alerts**



Keep your litigation team up-to-date with **real-time** alerts and advanced team management tools built for the enterprise, all while greatly reducing PACER spend.

Our comprehensive service means we can handle Federal, State, and Administrative courts across the country.

### **Advanced Docket Research**



With over 230 million records, Docket Alarm's cloud-native docket research platform finds what other services can't. Coverage includes Federal, State, plus PTAB, TTAB, ITC and NLRB decisions, all in one place.

Identify arguments that have been successful in the past with full text, pinpoint searching. Link to case law cited within any court document via Fastcase.

### **Analytics At Your Fingertips**



Learn what happened the last time a particular judge, opposing counsel or company faced cases similar to yours.

Advanced out-of-the-box PTAB and TTAB analytics are always at your fingertips.

#### API

Docket Alarm offers a powerful API (application programming interface) to developers that want to integrate case filings into their apps.

#### **LAW FIRMS**

Build custom dashboards for your attorneys and clients with live data direct from the court.

Automate many repetitive legal tasks like conflict checks, document management, and marketing.

#### **FINANCIAL INSTITUTIONS**

Litigation and bankruptcy checks for companies and debtors.

#### **E-DISCOVERY AND LEGAL VENDORS**

Sync your system to PACER to automate legal marketing.

