

**THE UNITED STATES DISTRICT COURT  
FOR THE EASTERN DISTRICT OF TEXAS  
MARSHALL DIVISION**

FUNDAMENTAL INNOVATION	§	
SYSTEMS INTERNATIONAL LLC,	§	
	§	
v.	§	CASE NO. 2:16-cv-1425-JRG-RSP
	§	
LG ELECTRONICS INC., et al.	§	
	§	

**CLAIM CONSTRUCTION**  
**MEMORANDUM OPINION AND ORDER**

On March 26, 2018, the Court held a hearing to determine the proper construction of disputed claim terms in United States Patents No. 7,239,111, 7,791,319, 7,834,586, 7,893,655, 7,999,514, 8,232,766, and 8,624,550. Having reviewed the arguments made by the parties at the hearing and in their claim construction briefing (Dkt. Nos. 123, 127 & 130),<sup>1</sup> having considered the intrinsic evidence, and having made subsidiary factual findings about the extrinsic evidence, the Court hereby issues this Claim Construction Memorandum and Order. *See Phillips v. AWH Corp.*, 415 F.3d 1303, 1314 (Fed. Cir. 2005); *see also Teva Pharm. USA, Inc. v. Sandoz, Inc.*, 135 S. Ct. 831, 841 (2015).

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<sup>1</sup> Citations to documents (such as the parties' briefs and exhibits) in this Claim Construction Memorandum and Order refer to the page numbers of the original documents rather than the page numbers assigned by the Court's electronic docket unless otherwise indicated.

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## I. BACKGROUND

Plaintiff Fundamental Innovation Systems International LLC (“Plaintiff” or “Fundamental” or “FISI”) has alleged infringement of United States Patents No. 7,239,111 (“the ’111 Patent”), 7,791,319 (“the ’319 Patent”), 7,834,586 (“the ’586 Patent”), 7,893,655 (“the ’655 Patent”), 7,999,514 (“the ’514 Patent”), 8,232,766 (“the ’766 Patent”), and 8,624,550 (“the ’550 Patent”) (collectively, the “patents-in-suit”) by Defendants LG Electronics, Inc., LG Electronics U.S.A., Inc., LG Electronics Mobilecomm U.S.A. Inc., LG Electronics Mobile Research U.S.A. LLC, LG Electronics Alabama, Inc., Huawei Investment & Holding Co., Ltd., Huawei Technologies Co., Ltd., Huawei Device USA, Inc., and Futurewei Technologies, Inc. (collectively, “Defendants”). Plaintiff submits that the patents-in-suit relate to “battery charging and power management.” Dkt. No. 123 at 1.

The ’111 Patent, titled “Universal Serial Bus Adapter for a Mobile Device,” issued on July 3, 2007, and bears an earliest priority date of March 1, 2001. The ’586 Patent, ’766 Patent, and ’550 Patent are continuations of the ’111 Patent, and these patents share the same specification. *See* Dkt. No. 103 at 1 n.1. The Abstract of the ’111 Patent states:

An adapter for providing a source of power to a mobile device through an industry standard port is provided. In accordance with one aspect of the invention, the adapter comprises a plug unit, a power converter, a primary connector, and an identification subsystem. The plug unit is operative to couple the adapter to a power socket and operative to receive energy from the power socket. The power converter is electrically coupled to the plug unit and is operable to regulate the received energy from the power socket and to output a power requirement to the mobile device. The primary connector is electrically coupled to the power converter and is operative to couple to the mobile device and to deliver the outputted power requirement to the mobile device. The identification subsystem is electrically coupled to the primary connector and is operative to provide an identification signal.

The ’319 Patent, titled “Circuit and Method of Operation for an Electrical Power Supply,” issued on September 7, 2010, and bears a filing date of February 21, 2003. The ’514

Patent is a continuation of the '319 Patent, and these patents share the same specification. *See*

Dkt. No. 103 at 1 n.2. The Abstract of the '319 Patent states:

A battery charging circuit comprising: a semiconductor switch having an output connected to a rechargeable battery; a battery charge controller for receiving power from an external source, and supplying output power to a portable device and the input of the semiconductor switch, the current output of the battery charge controller being controllable; and a voltage sensing circuit for: measuring the voltage drop across the battery charge controller; and responding to the voltage drop across the battery charge controller by modulating the semiconductor switch to reduce the quantity of current supplied to the rechargeable battery when the voltage drop is too great; whereby the total power dissipated by the battery charge controller is controlled, the portable device receiving the power it needs to operate and the rechargeable battery receiving any additional available power.

The '655 Patent, titled "Charging and Power Supply for Mobile Devices," issued on February 22, 2011, and bears an earliest priority date of December 13, 2005. The Abstract of the '655 Patent states:

Charging and power supply for mobile devices is disclosed. A USB-compliant charging and power supply circuit includes switch-mode battery charging circuitry for receiving power from an external power source and for supplying output power through an output node to an electronic system of an electronic communication device and a battery. Battery isolation circuitry includes a semiconductor switch connecting the output node to the battery. The battery isolation circuitry senses voltage at the output node and variably restricts current to the battery when the voltage is below a minimum voltage value by operationally controlling the semiconductor switch as current passes through it. During variable current restriction the electronic system is supplied required power with said battery being supplied any additional available power.

Plaintiff has referred to these three groupings of the patents-in-suit as "the Fischer Patents," "the '319 Patent Family," and "the '655 Patent," respectively. The '319 Patent Family and the '655 Patent, together, have sometimes been referred to as "the Veselic Patents."

The Court has previously construed terms in the patents-in-suit in *Fundamental Innovation Systems International LLC v. Samsung Electronics Co., Ltd., et al.*, No. 2:17-CV-145, Dkt. No. 140 (E.D. Tex. Jan. 31, 2018) ("*Samsung*").

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