UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

LG Electronics, Inc., LG Electronics U.S.A. Inc., LG Electronics Mobilecomm U.S.A. Inc., LG Electronics Mobile Research U.S.A. LLC, and LG Electronics Alabama, Inc.,

Petitioner

v.

Fundamental Innovation Systems International LLC,

Patent Owner.

PETITION FOR INTER PARTES REVIEW OF U.S. PATENT NO. 8,624,550 B2

Case No. IPR2018-00460

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

DOCKET

Δ

TABLE OF CONTENTS

I.	Mandatory Notices (37 C.F.R. § 42.8)				
	A.	Real Parties-in-Interest (§ 42.8(B)(1))1			
	B.	Related Matters (§ 42.8(B)(2))1			
	C.	Counsel Information (§ 42.8(b)(3))2			
II.	Payr	Payment of Fees (§ 42.15(A))			
III.	Grou	Grounds for Standing (§ 42.104(A))			
IV.	'550 Patent Background				
	A.	Summary			
	B.	Prosecution History			
	C.	Priority Date			
V.	Technology Background				
	A.	Person of Ordinary Skill in the Art6			
	B.	State of the Art			
VI.	Clair	Claim Construction (§ 42.104(B)(3))15			
VII.	Grounds of Rejection (§ 42.104(B)(1)-(2), (4))1				
	A.	Ground 1: Dougherty anticipates claims 1-3, 9-12, and 1817			
		1. Dougherty17			
		2. Application of Dougherty to claims 1-3, 9-12, and 18			
	B.	Ground 2: Dougherty and Shiga render obvious claims 4-8 and 13- 1741			
		1. Shiga41			

		2.	The Dougherty/Shiga combinations	46
		3.	Application of the Dougherty/Shiga combinations to claims 4-8 and 13-17	.56
	C.	Neith	er ground is redundant	63
VIII.	Conc	lusion		.64

EXHIBIT LIST

Exhibit	Description	Short Name
1001	U.S. Patent 8,624,550	'550 patent
1002	File History of U.S. Patent 8,624,550	'550 file history
1003	U.S. Provisional Application 60/273,021	'021 provisional
1004	U.S. Provisional Application 60/330,486	'486 provisional
1005	U.S. Patent 7,360,004	Dougherty
1006	U.S. Patent 6,625,738	Shiga
1007	Universal Serial Bus Specification, Revision 1.1, September 23, 1998	USB 1.1
1008	Universal Serial Bus Specification, Revision 2.0, April 27, 2000	USB 2.0
1009	Declaration of Mr. James Geier in Support of the Petition for Inter Partes Review of U.S. Patent 8,624,550	Geier
1010	U.S. Patent 6,625,790	Casebolt
1011	Cypress CY7C63722/23 CY7C63742/43 enCoRe [™] USB Combination Low-Speed USB & PS/2 Peripheral Controller (Cypress enCoRe or Cypress Datasheet), by Cypress Semiconductor Corporation, published May 25, 2000	Cypress datasheet
1012	U.S. Patent 6,531,845	Kerai
1013	File History of U.S. Patent No. 7,360,004	Dougherty file history

Petitioner, LG Electronics, Inc., LG Electronics U.S.A. Inc., LG Electronics Mobilecomm U.S.A. Inc., LG Electronics Mobile Research U.S.A. LLC, and LG Electronics Alabama, Inc., requests inter partes review ("IPR") of claims 1-18 of U.S. Patent No. 8,624,550 B2 ("the '550 patent"). As explained below, there is a reasonable likelihood that Petitioner will prevail on at least one claim challenged in this petition.

I. Mandatory Notices (37 C.F.R. § 42.8)

A. Real Parties-in-Interest (§ 42.8(B)(1))

LG Electronics, Inc., LG Electronics U.S.A. Inc., LG Electronics

Mobilecomm U.S.A. Inc., LG Electronics Mobile Research U.S.A. LLC, and LG Electronics Alabama, Inc., are the real parties-in-interest.

B. Related Matters (§ 42.8(B)(2))

The '550 patent is the subject of Civil Action Nos. 2:17-cv-00145-JRG,

2:16-cv-01424-JRG-RSP, and 2:16-cv-01425-JRG-RSP, which are pending in the

U.S. District Court for the Eastern District of Texas, and Civil Action No. 3:17-cv-

01827-N, which is pending in the U.S. District Court for the Northern District of

Texas.¹

The '550 patent is subject to ZTE (USA) Inc. et al., v. Fundamental

¹ The unpatentability positions herein take into account Patent Owner's infringement positions in the co-pending litigation and in some instances are based in-part on these positions.

DOCKET A L A R M



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.