

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.,
Petitioners,

v.

FUNDAMENTAL INNOVATION SYSTEMS INTERNATIONAL LLC,
Patent Owner.

Case IPR2018-00495
Patent No. 7,239,111

**FUNDAMENTAL INNOVATION SYSTEMS INTERNATIONAL LLC's
PATENT OWNER PRELIMINARY RESPONSE**

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

TABLE OF CONTENTS

	<u>Page</u>
I. Introduction.....	1
II. Background On The USB Communication Protocol	5
A. Enumeration to Establish Communication Between Host And Device.....	5
B. Single Ended 1 (“SE1”) Line State	6
III. Summary Of The ’111 Patent.....	9
IV. The Prior Art References Differ From The ’111 Inventions.....	12
A. Dougherty Overview	12
1. Dougherty’s Docking Station	12
2. Dougherty’s Alleged Improvement Over Prior Art.....	14
3. Dougherty’s Docking Station Logic	15
(a) Docking When Laptop Is Operational.....	16
(b) Docking When Laptop Is Non-Operational (Dead Battery Or No Battery)	18
B. Shiga Overview	18
V. Skill Level Of A POSA	20
VI. The Board Should Deny Institution Because LG Has Failed to Name All Real Parties-in-Interest.....	20
VII. The Board Should Exercise Its Discretion Under 325(d).....	26
VIII. Ground 1: Claims 1-3, 6, 8, 16, and 17 Are Not Obvious Over Dougherty In View Of DeJaco, Hahn, and Shiga	27

Page

A.	Petitioners Fail to Present Competent Evidence That A POSA Would Have Used Hahn’s Power Supply For Dougherty’s Docking Station.....	28
1.	Petitioners Ignore That Hahn’s Power Supply Is Incompatible With Dougherty’s Docking Station	28
2.	Petitions Fail To Present Competent Evidence That A POSA Would Have Considered Dougherty and Hahn Simultaneously.....	29
B.	Petitioners Fail To Present Competent Evidence That The Proposed Combination Discloses An Identification Signal “Configured To Indicate To The Mobile Device That The Power Socket Is Not A USB Host Or Hub”	34
C.	Petitioners Fail To Provide Any Competent Factual Basis For Their Assertion Of A Motivation To Combine Dougherty, DeJaco, Hahn, and Shiga.....	37
1.	The Prior Art Does Not Teach Using SE1 As An “Identification Signal”	40
2.	A POSA Would Conclude That Petitioners’ Proposed Combination Had No Reasonable Expectation of Success	44
(a)	A POSA Would Believe That Dougherty’s Laptop Would Not Be Able To Receive SE1 Signals While Maintaining Normal USB Communications.....	44
(b)	Even If The Laptop Were Programmed To Respond To An SE1 Identification Signal, A POSA Would Conclude That The Proposed Combination Is Still Inoperative	46
3.	A POSA Would Believe That Making The Suggested Modifications Would Disable The Dougherty Docking Station’s Primary Functionality	48

Page

4.	A POSA Could Not Use Petitioners' Proposed Modification In Dougherty's "Dead Battery" Scenario	51
5.	Shiga Is Not Analogous Art.....	53
IX.	Ground 2: Claims 12 and 14 Are Not Obvious Over Dougherty In View of DeJaco, Hahn, Shiga, and Amoni.....	56
X.	Ground 3: Claims 7 and 18 Are Not Obvious Over Dougherty In View Of DeJaco, Hahn, Shiga, and USB 2.0	58
XI.	Conclusion	59

TABLE OF AUTHORITIES

	<u>Page(s)</u>
Cases	
<i>Apple Inc. v. Immersion Corp.</i> , IPR2016-01371, Paper 7 (Jan. 11, 2017).....	27, 35
<i>Arendi S.A.R.L. v. Apple Inc.</i> , 832 F.3d 1355 (Fed. Cir. 2016)	33
<i>Atlanta Gas Light Co.</i> , Case IPR2013-00456, slip op.	20
<i>Atlanta Gas Light Co. v. Bennett Regulatory Guards, Inc.</i> , Case IPR2013-00456, slip op. (PTAB Jan. 6, 2015).....	20, 21, 22, 23
<i>In re Bigio</i> , 381 F.3d 1320 (Fed. Cir. 2004)	52
<i>Broadcom Corp. v. Emulex Corp.</i> , 732 F.3d 1325 (Fed. Cir. 2013)	30, 42, 46, 57
<i>CFMT, Inc. v. Yieldup Intern. Corp.</i> , 349 F.3d 1333 (Fed. Cir. 2003)	55, 57
<i>In re Clay</i> , 966 F.2d 656 (Fed. Cir. 1992)	53
<i>In re Gordon</i> , 733 F.2d 900 (Fed. Cir. 1984)	27, 49, 50
<i>In re Klein</i> , 647 F.3d 1343 (Fed. Cir. 2011)	52, 54
<i>Microsoft Corp. v. Enfish, LLC</i> , 662 Fed. App'x 981 (Fed. Cir. 2016)	28, 30
<i>Nichia Corp. v. Everlight Americas, Inc.</i> , 855 F.3d 1328 (Fed. Cir. 2017)	29, 30

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.