

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

HUAWEI DEVICE CO., LTD.,
Petitioner,

v.

FUNDAMENTAL INNOVATION SYSTEMS INTERNATIONAL LLC,
Patent Owner.

Case IPR2018-00487
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.....	6
B. Single Ended 1 (“SE1”) Line State	6
III. Summary Of The ’111 Patent.....	10
IV. The Prior Art References Differ From The ’111 Inventions.....	11
A. Theobald Overview	12
B. Dougherty Overview	13
1. Dougherty’s Docking Station	13
2. Dougherty’s Alleged Improvement Over Prior Art.....	15
3. Dougherty’s Docking Station Logic	16
(a) Docking When Laptop Is Operational.....	16
(b) Docking When Laptop Is Non-Operational (Dead Battery Or No Battery)	18
C. Shiga Overview	19
V. Skill Level Of A POSA	20
VI. The Board Should Deny The Petition Under 325(d).....	20
VII. Ground 1: Claims 1-3, 6-8, and 16-18 Are Not Obvious Over Theobald In View Of USB 2.0 and Shiga	21
A. Petitioner Fails To Present Competent Evidence That The Proposed Combination Discloses An Identification Signal	

Page

“Configured To Indicate To The Mobile Device That The Power Socket Is Not A USB Host Or Hub”	22
B. Petitioner Fails To Provide Any Competent Factual Basis For Its Assertion Of A Motivation To Combine Theobald, USB 2.0, and Shiga	27
1. The Petition Relies On The Conclusory Premise That Theobald Operates Outside Of Standard Power Limits	30
2. The Petition Fails To Explain Why A POSA Would Have Used The Non-Standard SE1 Signal In Theobald’s System.....	32
3. The Petition Fails To Identify Any Teaching In The Prior Art Supporting Its Proposed Use Of SE1 In Theobald.....	35
4. The Petition Fails To Establish That Shiga Is Analogous Art To The ’111 Patent.....	38
VIII. Ground 2: Claims 1-3, 6-8, and 16-18 Are Not Obvious Over Dougherty In View of Shiga.....	40
A. Petitioner Fails To Specifically Point Out The Existence Of “Plug Unit” Or “Power Converter” In The Combination	40
B. Petitioner Fails 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”.....	41
C. Petitioner Fails To Provide Any Competent Factual Basis For Its Assertion Of A Motivation To Combine Dougherty and Shiga	45
1. The Prior Art Does Not Teach Using SE1 As An “Identification Signal”	47

Page

2.	A POSA Would Conclude That Petitioner’s Proposed Combination Had No Reasonable Expectation of Success	51
(a)	A POSA Would Believe That Dougherty’s Laptop Would Not Be Able To Receive SE1 Signals While Maintaining Normal USB Communications	51
(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	53
3.	A POSA Would Believe That Making The Suggested Modifications Would Disable The Dougherty Docking Station’s Primary Functionality	55
4.	A POSA Could Not Use Petitioner’s Proposed Modification In Dougherty’s “Dead Battery” Scenario	57
5.	The Petition Fails To Establish That Shiga Is Analogous Art To The ’111 Patent.....	59
IX.	Conclusion	59

TABLE OF AUTHORITIES

	Page(s)
Cases	
<i>Apple Inc. v. Immersion Corp.</i> , IPR2016-01371, Paper 7 (Jan. 11, 2017).....	24, 42
<i>Arendi S.A.R.L. v. Apple Inc.</i> , 832 F.3d 1355 (Fed. Cir. 2016)	23, 37
<i>In re Bigio</i> , 381 F.3d 1320 (Fed. Cir. 2004)	39
<i>Broadcom Corp. v. Emulex Corp.</i> , 732 F.3d 1325 (Fed. Cir. 2013)	51, 55
<i>In re Clay</i> , 966 F.2d 656 (Fed. Cir. 1992)	39
<i>In re Gordon</i> , 733 F.2d 900 (Fed. Cir. 1984)	44, 57, 59
<i>In re Klein</i> , 647 F.3d 1343 (Fed. Cir. 2011)	39, 40
<i>Par Pharm. v. TWI Pharm.</i> 773 F.3d 1186 (Fed. Cir. 2014)	2, 29, 35
<i>In re Ratti</i> , 270 F.2d 810 (C.C.P.A. 1959)	35
<i>Sensonics Inc. v. Aerosonic Corp.</i> , 81 F.3d 1566 (Fed. Cir. 1996)	30
<i>In re Stepan Co.</i> , 868 F.3d 1342 (Fed. Cir. 2017)	47, 51, 54
<i>Univ. of Md. Biotechnology Inst. v. Presens Precision Sensing GmbH</i> , 711 Fed. Appx. 1007.....	35

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.