

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

---

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

Case No. IPR2018-00111

---

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

I.	Mandatory Notices (37 C.F.R. § 42.8).....	1
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.	Payment of Fees (§ 42.15(A)).....	2
III.	Grounds for Standing (§ 42.104(A)).....	2
IV.	'550 Patent Background.....	2
A.	Summary.....	2
B.	Prosecution History.....	3
C.	Priority Date.....	4
V.	Technology Background.....	5
A.	Person of Ordinary Skill in the Art.....	5
B.	State of the Art.....	5
VI.	Claim Construction (§ 42.104(B)(3)).....	14
VII.	Grounds of Rejection (§ 42.104(B)(1)-(2), (4)).....	15
A.	Ground 1: Rogers renders obvious claims 1-3, 9-12, and 18.....	16
1.	Rogers.....	16
2.	Application of Rogers to claims 1-3, 9-12, and 18.....	22
B.	Ground 2: Rogers and Shiga render obvious claims 4-8 and 13-17. ...	36
1.	Shiga.....	36
2.	The Rogers/Shiga combination.....	40

3.	Application of the Rogers/Shiga combination to claims 4-8 and 13-17.....	46
C.	Neither ground is redundant.....	54
VIII.	Conclusion.....	55

## EXHIBIT LIST

Exhibit	Description	Short Name
1001	U.S. Patent 8,624,550 B2	'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 6,556,564 B2	Rogers
1006	U.S. Patent 6,625,738 B1	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 No. 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	U.S. Provisional Application 60/181,099	Rogers provisional

Petitioner, ZTE (USA) Inc., Samsung Electronics Co., Ltd., and Samsung Electronics America, 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))**

ZTE Corporation, ZTE (USA) Inc., Samsung Electronics Co., Ltd., and Samsung Electronics America, 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.<sup>1</sup> The ’550 patent is also subject to IPR2018-00110, filed by the same Petitioner and pending institution. Petitioner is unaware of any other pending matter that would affect, or be affected by, a decision in this proceeding.

---

<sup>1</sup> 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.

# 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.