

UNITED STATES PATENT AND TRADEMARK OFFICE
BEFORE THE PATENT TRIAL AND APPEAL BOARD

Samsung Electronics America, Inc. and
Samsung Electronics Co., Ltd.
Petitioner,

v.

RF Cyber Corp.,
Patent Owner.

Patent No. 9,240,009 to Koh et al.

IPR Case No.: IPR2021-00981

DECLARATION OF GERALD W. SMITH

TABLE OF CONTENTS

I.	INTRODUCTION AND QUALIFICATIONS	1
A.	Educational Background	1
B.	Professional Experience	2
II.	METHODOLOGY; MATERIALS CONSIDERED.....	6
III.	OVERVIEW AND LEGAL STANDARDS	8
A.	Person of Ordinary Skill in the Art	8
B.	Anticipation	9
C.	Obviousness.....	10
D.	Claim Construction	13
IV.	PRIORITY DATE (DATE OF INVENTION).....	13
V.	LEVEL OF ORDINARY SKILL IN THE ART	13
VI.	OVERVIEW OF THE '009 PATENT	15
VII.	THE PROSECUTION HISTORY OF THE '009 PATENT.....	18
VIII.	GLOBALPLATFORM CARD SPECIFICATION VERSION 2.1.1 – AUTHENTICATION THEREOF AND OVERVIEW	20
A.	Overview of GlobalPlatform.....	22
B.	Overview of GlobalPlatform Security Domains	24
C.	Overview of GlobalPlatform Secure Communication Channels	27
IX.	CLAIM CONSTRUCTION FOR THE '009 PATENT	32
X.	PRIOR ART REVIEW	32
A.	Background relating to electronic purses.....	32
B.	Background relating to smart cards.....	35
C.	Dua (Ex-1004).....	39
D.	Smart Card Handbook (Ex-1008)	43
1.	The Smart Card Life Cycle	45
E.	Thibadeau (Ex-1041).....	49

XI.	ANALYSIS.....	50
A.	GROUND 1: Dua in view of GlobalPlatform discloses every limitation of claims 1-6 and 13-17	50
1.	The scope and content of the prior art	50
2.	Motivation/Rationale for Combining the Prior Art	50
3.	Challenged Claims	55
A.	GROUND 2: Dua in view of GlobalPlatform and Smart Card Handbook discloses all limitations of claims 7-10	112
1.	The scope and content of the prior art	112
2.	Motivation/Rationale for Combining the Prior Art	113
3.	Application of Prior Art to Claims 7-10	117
B.	GROUND 3: Dua in view of GlobalPlatform, Smart Card Handbook, and Thibadeau discloses all limitations claims 11 and 12	128
1.	The scope and content of the prior art	128
2.	Motivation/Rationale for Combining the Prior Art	128
XII.	DECLARATION IN LIEU OF OATH	134

CLAIM LISTING

CLAIM 1:

[1.PREAMBLE] A mobile device for conducting a secured transaction over a network, the mobile device comprising:

[1a] a network interface;

[1b] an interface to receive a secure element;

[1c] a memory space for storing at least a module and an application downloaded from the network;

[1d] a processor coupled to the memory space and configured to execute the module to perform operations including:

[1di] sending to a server via the network interface an identifier identifying the application together with device information of a secure element,

[1dii] wherein the application is downloaded from the network in the mobile device;

[1diii] establishing a secured channel between the secure element and the server using a key set installed on the secure element, **[1div]** wherein the server is configured to prepare data necessary for the application to function as designed on the mobile device; and

[1dv] receiving the data from the server to associate the application with the secure element, [1dvi] wherein the application subsequently functions in conjunction with the secure element.

CLAIM 2:

The mobile device as recited in claim 1, wherein the data received in the mobile device includes an application key set for the application, and a user interface specifically designed for the mobile device.

CLAIM 3:

The mobile device as recited in claim 2, wherein the mobile device is a near field communication (NFC) enabled mobile phone, and the application is an electronic purse (e-purse), the mobile device is used to exchange secured data with another device within a near distance to conduct a transaction.

CLAIM 4:

The mobile device as recited in claim 3, wherein the secured data is being exchanged over a secured channel between the mobile device and the another device established by the application key set.

CLAIM 5:

The mobile device as recited in claim 4, wherein the transaction is conducted without the mobile device communicating with a transaction server.

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.