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

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

v.

RFCyber Corp., Patent Owner.

Patent No. 9,189,787 to Koh et al.

IPR Case No.: IPR2021-00980

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	9		
	B. Anticipation	9		
	C. Obviousness	10		
	D. Claim Construction	13		
IV.	LEVEL OF ORDINARY SKILL IN THE ART	13		
V.	OVERVIEW OF THE '787 PATENT	15		
VI.	THE PROSECUTION HISTORY OF THE '787 PATENT AND RELATED PATENTS20			
	1. Prosecution History of the '218 Patent	20		
	2. Prosecution History of the '855 Patent	24		
	3. Prosecution History of the '787 Patent	25		
VII.	GLOBALPLATFORM CARD SPECIFICATION VERSION 2.1.1 –	20		
	AUTHENTICATION THEREOF AND OVERVIEW			
	A. Overview of GlobalPlatform			
	B. Overview of GlobalPlatform Security Domains			
	C. Overview of GlobalPlatform Secure Communication Channels			
VIII.	CLAIM CONSTRUCTION FOR THE '787 PATENT			
	A. "Midlet"			
	B. "Emulator"	40		
	C. Additional terms	40		
IX.	PRIOR ART REVIEW	40		



Declaration of Gerald W. Smith IPR2021-00980 U.S. Patent No. 9,189,787

	Α.	Background relating to electronic purses	40
	В.	Background relating to smart cards	43
		1. The Smart Card Life Cycle	47
	C.	Dua (Ex-1004)	51
	D.	Philips (Ex-1012)	54
X.	ANA	ALYSIS	56
	Α.	GROUND 1: Dua in view of GlobalPlatform further in view of Philips discloses every limitation of claims 1-19	56
		1. The scope and content of the prior art	56
		2. Motivation/Rationale for Combining the Prior Art	56
		3. Challenged Claims	64
XI.	DEC	CLARATION IN LIEU OF OATH	111

CLAIM LISTING

Claim 1:

[Claim 1-PREAMBLE] A portable device for commerce, the portable device comprising:

[1a] an emulator loaded in a smart card module for storing security values and updated transaction logs, and

[1b] an e-purse applet to cause the portable device to function as an electronic purse (e-purse),

[1c] wherein both of the emulator and e-purse applet are already personalized via a personalization process built on a first security channel so that the emulator is set to store a set of keys for subsequent data access authentication and the e-purse applet is configured to conduct a transaction with a network server over a second security channel;

[1d] a first interface configured to perform field communication (NFC) with a reader to perform electronic commerce with the e-purse applet against a fund stored in the emulator;

[1e] a second interface configured to perform mobile commerce with a payment server via an application against the fund stored in the emulator; and



Declaration of Gerald W. Smith IPR2021-00980

U.S. Patent No. 9,189,787

[1f] a purse manager midlet being executed in the portable device to act as an

agent to facilitate communications between the e-purse applet and a payment server

to conduct transactions therebetween.

Claim 2:

The portable device as recited in claim 1, further comprising a security module

configured to install and personalize the e-purse applet via either the first interface

or the second interface, wherein the keys are updated when the personalization

process built on the first security channel completes.

Claim 3:

The portable device as recited in claim 1, wherein the e-purse is built on top

of a global platform to be able to access MIFARE data structures with an appropriate

transformed password based on the keys in the emulator, wherein the global platform

is a cross-industry membership organization created to advance standards for smart

card growth.

Claim 4:

The portable device as recited in claim 1, wherein the first interface is based

on a RFID interface that allows the portable device to act as a tag to be read off by

the reader connected to a computing device coupled to the Internet.

DOCKET

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.

