

UNITED STATES PATENT AND TRADEMARK OFFICE

---

BEFORE THE PATENT TRIAL AND APPEAL BOARD

---

SAMSUNG ELECTRONICS AMERICA, INC. and SAMSUNG  
ELECTRONICS CO., LTD.,

Petitioner,

v.

RFCYBER CORP.,

Patent Owner.

---

IPR2021-00980

Patent 9,189,787 B1

---

Before PATRICK R. SCANLON, KEVIN W. CHERRY, and  
KRISTI L. R. SAWERT, *Administrative Patent Judges*.

SAWERT, *Administrative Patent Judge*.

DECISION

Granting Institution of *Inter Partes* Review

35 U.S.C. § 314

## I. INTRODUCTION

Samsung Electronics America, Inc. and Samsung Electronics Co., Ltd. (“Petitioner”) filed a petition to institute *inter partes* review of claims 1–19 of U.S. Patent No. 9,189,787 B1 (Ex. 1001, “the ’787 patent”). Paper 2 (“Pet.”). RFCyber Corp. (“Patent Owner”) filed a Preliminary Response. Paper 6 (“Prelim. Resp.”). On our authorization, Petitioner filed a Reply to Patent Owner’s Preliminary Response. Paper 9 (“Reply”). Patent Owner filed a Sur-Reply. Paper 10 (“Sur-Reply”).

We have authority under 35 U.S.C. § 314 to determine whether to institute an *inter partes* review. The standard for instituting an *inter partes* review is set forth in 35 U.S.C. § 314(a), which provides that an *inter partes* review may not be instituted unless “there is a reasonable likelihood that the petitioner would prevail with respect to at least 1 of the claims challenged in the petition.” The Supreme Court has held that the Board, in a decision to institute under 35 U.S.C. § 314(b), may not institute review on less than all claims challenged in the petition. *SAS Inst. Inc. v. Iancu*, 138 S. Ct. 1348, 1355–56 (2018). Moreover, in accordance with our rules, “[w]hen instituting *inter partes* review, the Board will authorize the review to proceed on all of the challenged claims and on all grounds of unpatentability asserted for each claim.” 37 C.F.R. § 42.108(a) (2020); *see also PGS Geophysical AS v. Iancu*, 891 F.3d 1354, 1360 (Fed. Cir. 2018) (interpreting the statute to require “a simple yes-or-no institution choice respecting a petition, embracing all challenges included in the petition”).

After considering the Petition, the Preliminary Response, the Reply, the Sur-Reply, and the evidence of record, we determine the information presented shows a reasonable likelihood that Petitioner would prevail in

establishing the unpatentability of at least one of the challenged claims of the '787 patent. Accordingly, we institute an *inter partes* review of all challenged claims (i.e., claims 1–19) of the '787 patent on the grounds asserted in the Petition.

## II. BACKGROUND

### A. *Related Matters*

The parties identify the following district-court proceedings as related matters involving the '787 patent: *RF Cyber Corp. v. Google LLC*, No. 2:20-cv-00274 (EDTX); *RF Cyber Corp. v. LG Electronics, Inc.*, No. 2:20-cv-00336 (EDTX); and *RF Cyber Corp. v. Samsung Electronics Co.*, 2:20-cv-00335 (EDTX) (consolidated with No. 2:20-cv-00274). Pet. 3–4; Paper 4, 2 (Patent Owner's Mandatory Notices).

The parties also identify the following Board proceedings involving the same parties and related patents: IPR2021-00978 (U.S. Patent No. 8,448,855 B1 ("the '855 patent")); IPR2021-00979 (U.S. Patent No. 8,118,218 B2 ("the '218 patent")); and IPR2021-00981 (U.S. Patent No. 9,240,009 B2 ("the '099 patent")). Pet. 4; Paper 4, 1–2. The parties also identify the following Board proceedings involving the '787 patent or related patents, filed by petitioner Google LLC: IPR2021-00954 (the '855 patent); IPR2021-00955 (the '787 patent); IPR2021-00956 (the '009 patent); IPR2021-00957 (the '218 patent); PGR2021-00028 (U.S. Patent No. 10,600,046 B2); and PGR2021-00029 (challenging U.S. Patent No. 10,600,046 B2). Pet. 3–4; Paper 4, 1. The proceedings in IPR2021-00954, IPR2021-00955, IPR2021-00956, and IPR2021-00957 were terminated without a decision on institution on October 20, 2021. *See, e.g.*,

IPR2021-00954, Paper 12. The proceeding in PGR2021-00029 was terminated on November 16, 2021. PGR2021-00029, Paper 16.

*B. Real Parties in Interest*

Petitioner identifies its real party in interest as Samsung Electronics America, Inc. and Samsung Electronics Co., Ltd. Pet. 3. Patent Owner identifies RFCyber Corp. as its real party in interest. Paper 4, 1.

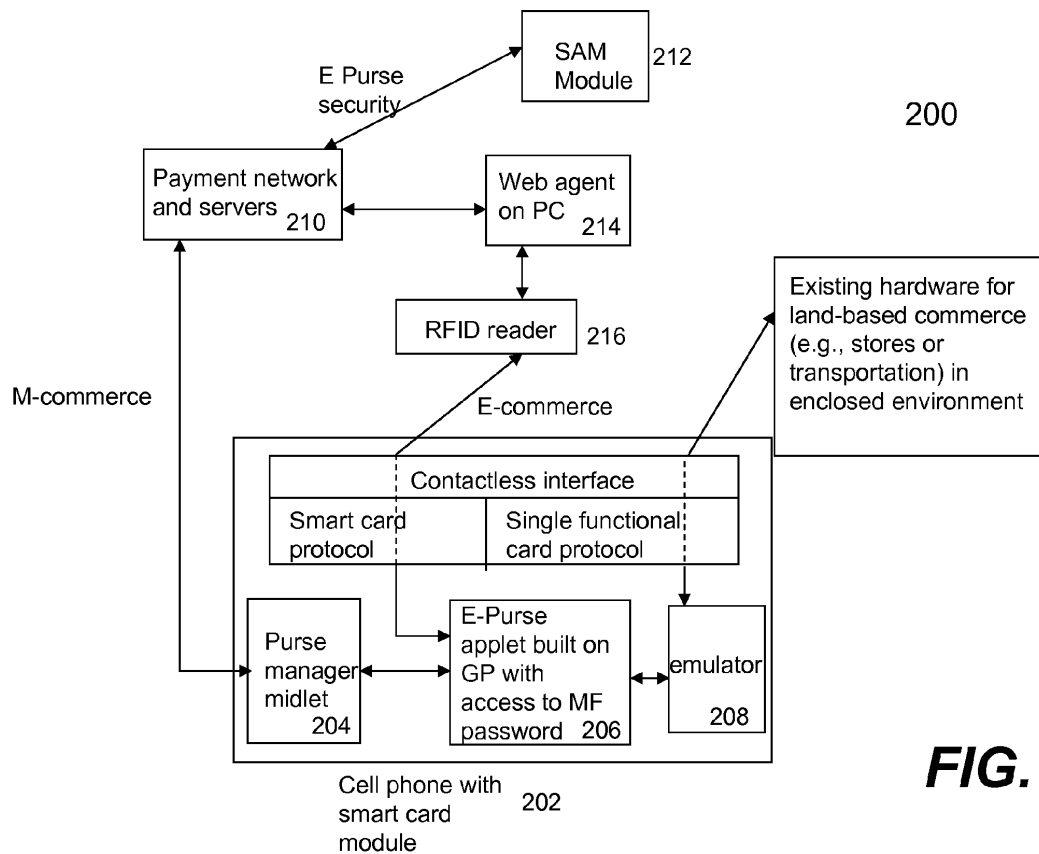
*C. Overview of the '787 patent*

The '787 patent relates to commerce over networks, and more specifically, to a method and apparatus for funding an electronic purse (“e-purse”) for use in portable devices configured for both electronic commerce (“e-commerce”) and mobile commerce (“m-commerce”). Ex. 1001, code (57), 1:15–19.

The '787 patent states that there is a “need for a mechanism in devices, especially portable devices, functioning as an electronic purse (e-purse) to be able to conduct transactions over an open network with a payment server without compromising security.” *Id.* at 1:44–48. Although closed systems—such as smart card technology—existed, they were “difficult to be expanded into other areas such as e-commerce and m-commerce” because “stored values and transaction information are stored in data storage of each tag that is protected by a set of keys,” which keys must be “delivered to the card for authentication before data can be accessed during a transaction.” *Id.* at 1:33–39. According to the '787 patent, this required delivery of keys “makes systems using such technology difficult to be expanded to an open environment such as the Internet for e-commerce and cellular networks for m-commerce as the key delivery over a public domain network causes security concerns.” *Id.* at 1:39–43. The '787 patent

purports to overcome the limitations of the prior art by providing a system for funding an e-purse stored on a portable device. The e-purse allows for transactions “over an open network with a payment server without compromising security.” *Id.* at 1:60–64.

Figure 2, reproduced below, provides a schematic view of one embodiment of the '787 patent.



**FIG. 2**

FIG. 2 shows an exemplary architecture diagram 200 according to one embodiment of the '787 patent. Ex. 1001, 3:6–7.

As shown in Figure 2, a portable device is pre-loaded with smart card module 202 comprising an emulator 208, an e-purse applet 206, and a purse manager midlet 204. *Id.* at 5:1–48. The portable device may be a cellphone that is “near field communication (NFC) enabled” and includes an RFID interface “that allows the cellphone to act as a tag.” *Id.* at 5:4–10.

# 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.