



US008118218B2

(12) **United States Patent**
Koh et al.

(10) **Patent No.:** **US 8,118,218 B2**
(45) **Date of Patent:** **Feb. 21, 2012**

(54) **METHOD AND APPARATUS FOR PROVIDING ELECTRONIC PURSE**

(75) Inventors: **Liang Seng Koh**, Fremont, CA (US); **Futong Cho**, Milpitas, CA (US); **Hsin Pan**, Fremont, CA (US); **Fuliang Cho**, San Jose, CA (US)

(73) Assignees: **Rich House Global Technology Ltd.**, Shenzhen (CN); **RFCyber Corp.**, Fremont, CA (US)

(*) Notice: Subject to any disclaimer, the term of this patent is extended or adjusted under 35 U.S.C. 154(b) by 1057 days.

(21) Appl. No.: **11/534,653**

(22) Filed: **Sep. 24, 2006**

(65) **Prior Publication Data**
US 2008/0073426 A1 Mar. 27, 2008

(51) **Int. Cl.**
G06K 5/00 (2006.01)

(52) **U.S. Cl.** **235/380; 235/451; 235/492; 705/26; 705/39; 705/40; 705/41; 705/64**

(58) **Field of Classification Search** **235/379, 235/380, 492**

See application file for complete search history.

(56) **References Cited**

U.S. PATENT DOCUMENTS

6,607,136 B1 * 8/2003 Atsmon et al. 235/492
2002/0145632 A1 * 10/2002 Shmueli et al. 345/835
2009/0313689 A1 * 12/2009 Nystrom et al. 726/9

FOREIGN PATENT DOCUMENTS

WO WO 2007068991 A1 * 6/2007

* cited by examiner

Primary Examiner — Thien M. Le

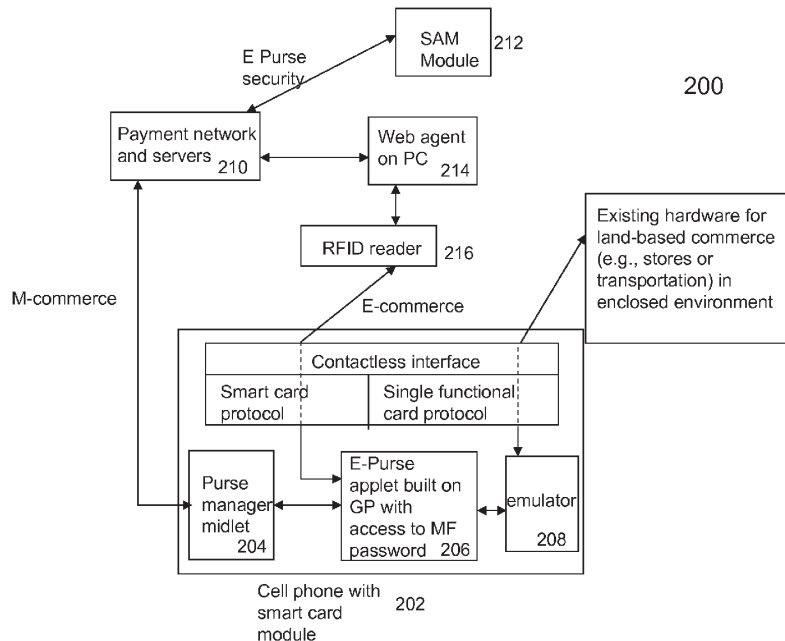
Assistant Examiner — Christopher Stanford

(74) *Attorney, Agent, or Firm* — Joe Zheng

(57) **ABSTRACT**

Techniques for portable devices functioning as an electronic purse (e-purse) are disclosed. According to one aspect of the invention, a mechanism is provided to enable a portable device to conduct transactions over an open network with a payment server without compromising security. In one embodiment, a device is loaded with an e-purse manager. The e-purse manager is configured to manage various transactions and functions as a mechanism to access an emulator therein. The transactions may be conducted over a wired network or a wireless network. A three-tier security model is contemplated to support the security of the transactions from the e-purse. The three-tier security model includes a physical security, an e-purse security and a card manager security, concentrically encapsulating one with another. Security keys (either symmetric or asymmetric) are personalized within the three-tier security model.

18 Claims, 9 Drawing Sheets



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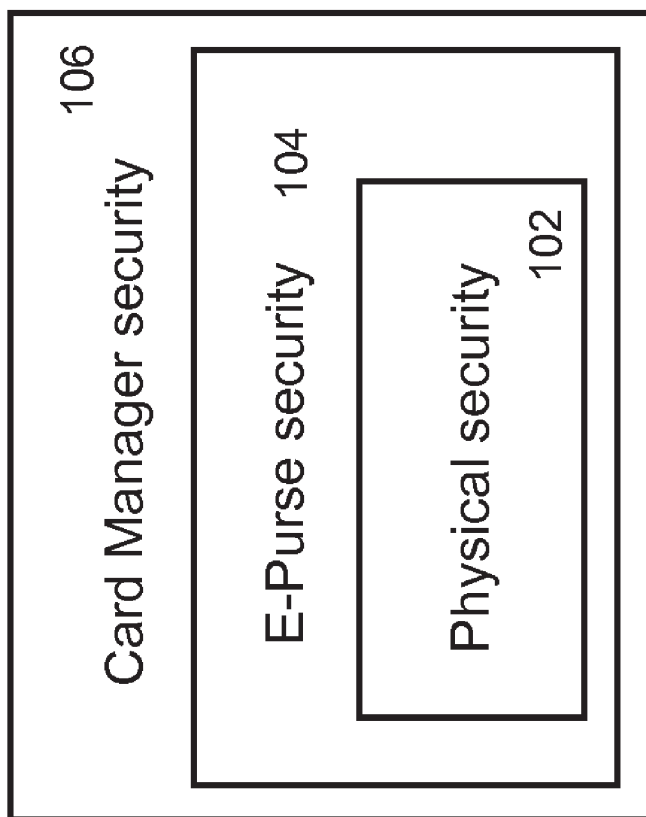


FIG. 1A

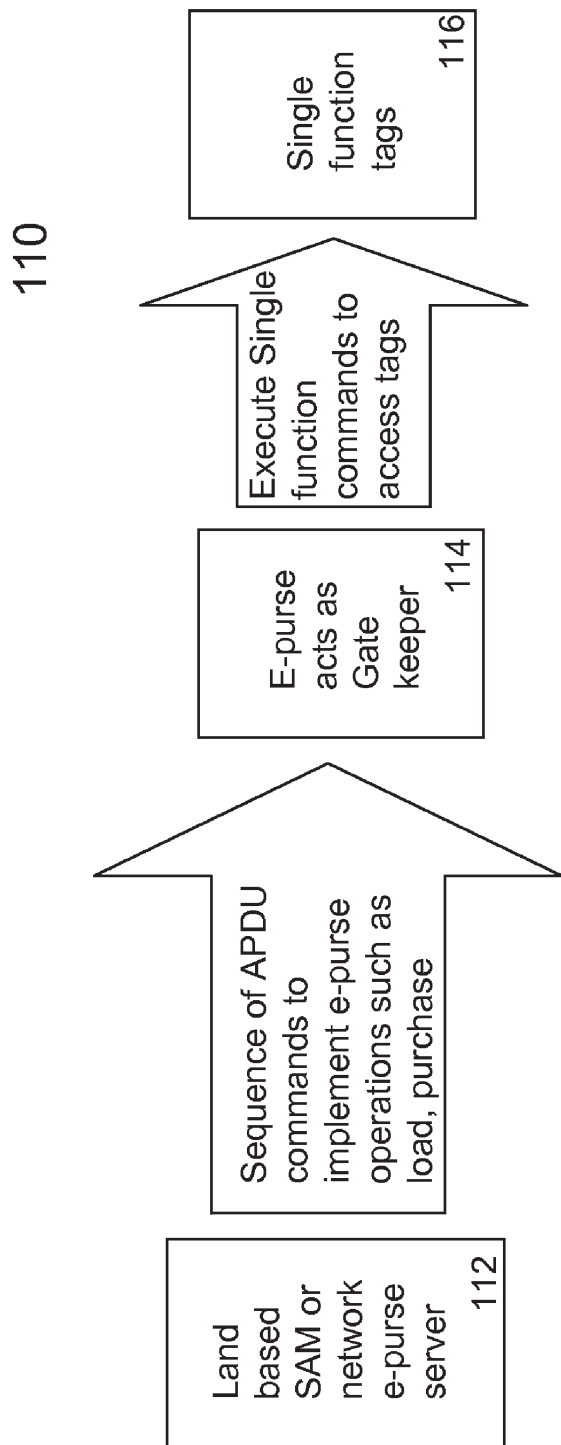


FIG. 1B

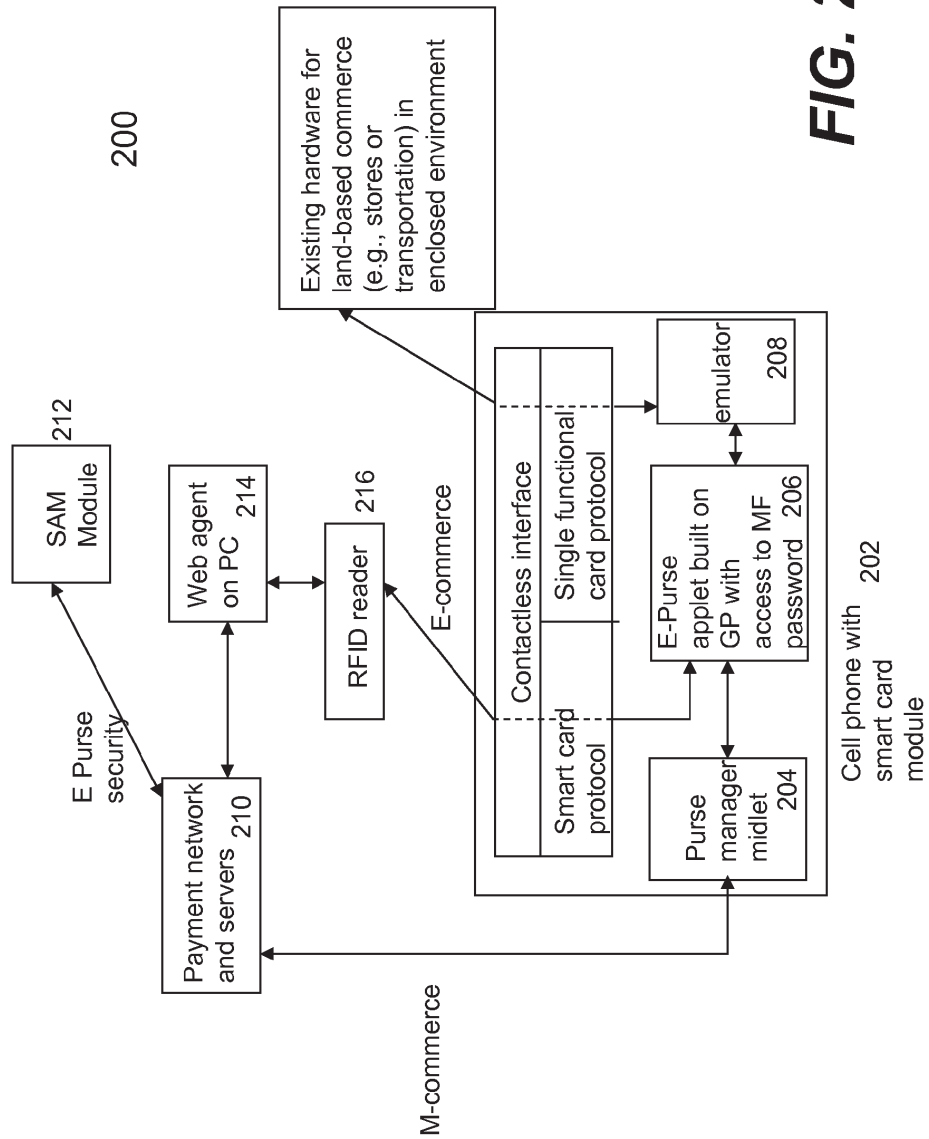


FIG. 2

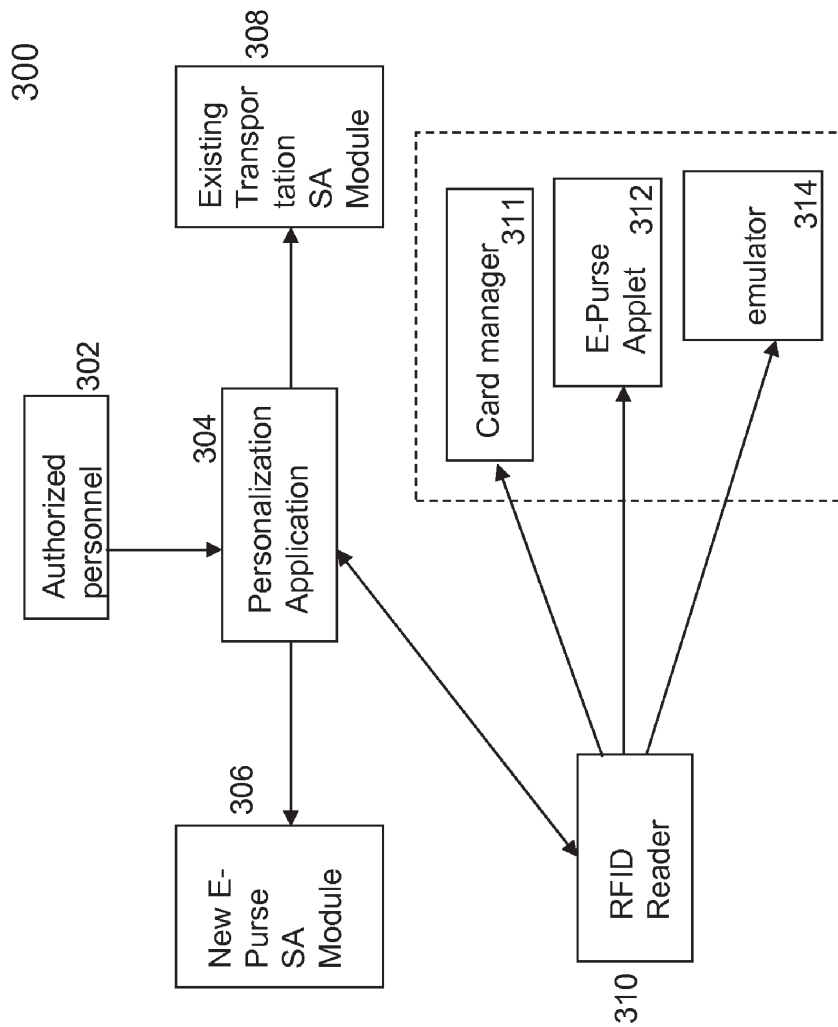


FIG. 3A

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