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

(10) **Patent No.: US 6,385,729 B1**

(45) **Date of Patent: May 7, 2002**

(54) **SECURE TOKEN DEVICE ACCESS TO SERVICES PROVIDED BY AN INTERNET SERVICE PROVIDER (ISP)**

WO WO 98/06054 2/1998

OTHER PUBLICATIONS

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Java card Internet, Scott, Guthery, 2 pages, Feb. 1997.*
Dallas Semiconductor Java Links iButton, 1 page, Aug. 1997.*

(73) Assignee: **Sun Microsystems, Inc.**, Palo Alto, CA (US)

"Java links ibutton to the internet," Dallas semiconductor press releases, Online! (1997) pp 1-3, XP002130009, <URL:http://www.dalsemi.com/News_Center/Pr.

(*) Notice: Subject to any disclaimer, the term of this patent is extended or adjusted under 35 U.S.C. 154(b) by 0 days.

Guthery, "Java card: Internet computing on a smart card," *IEEE Internet computing*, pp. 57-59 (1997).

* cited by examiner

(21) Appl. No.: **09/085,075**

Primary Examiner—James P. Trammell

Assistant Examiner—Pierre E Elisca

(22) Filed: **May 26, 1998**

(74) *Attorney, Agent, or Firm*—Lahive & Cockfield, LLP

(51) **Int. Cl.**⁷ **G06F 12/14**

(57) **ABSTRACT**

(52) **U.S. Cl.** **713/201; 713/172**

A secure token device, such as a smart card or an ibutton, provides a user with a vehicle for accessing services that are provided by an Internet Service Provider (ISP). The user places the secure token device in communication with a reader that is coupled to a computer system. The computer system includes a web browser for accessing the services provided by the ISP. The secure token device may perform an authentication protocol to authenticate itself to the ISP. The ISP may also be required to authenticate itself. The secure token device may hold an electronic currency token for payment of services rendered by the ISP. The secure token device may contain stored personal information about the user. The user may stipulate what portions of this personal information are provided to the ISP upon request. Contextual information regarding sessions with the ISP may also be stored on the secure token device and used to restore a context of a previous session during a subsequent session.

(58) **Field of Search** 713/172, 159, 713/170, 171, 173, 201; 705/50, 17, 51, 26, 52, 27, 53, 40, 43, 44, 45; 340/825.31, 825.34; 348/7

(56) **References Cited**

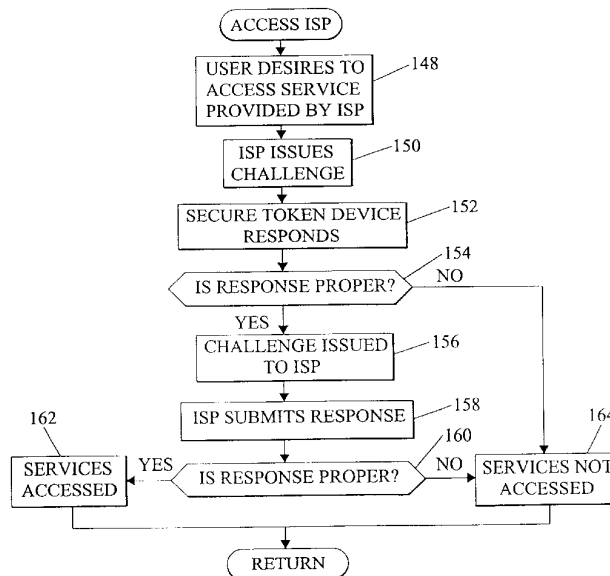
U.S. PATENT DOCUMENTS

5,586,166 A 12/1996 Turban 379/58
5,665,951 A 9/1997 Newman 235/375
6,038,367 A * 3/2000 Abecassis 386/46

FOREIGN PATENT DOCUMENTS

EP 644 513 3/1995
EP 0833285 A2 * 9/1997
EP 833 285 4/1998
WO WO 93/06546 * 11/1991
WO WO 97/14118 4/1997

34 Claims, 10 Drawing Sheets



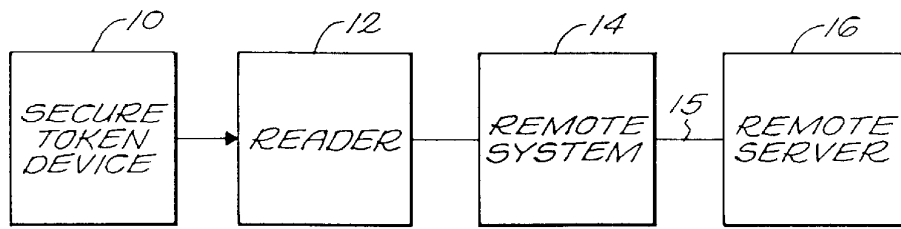


FIG. 1

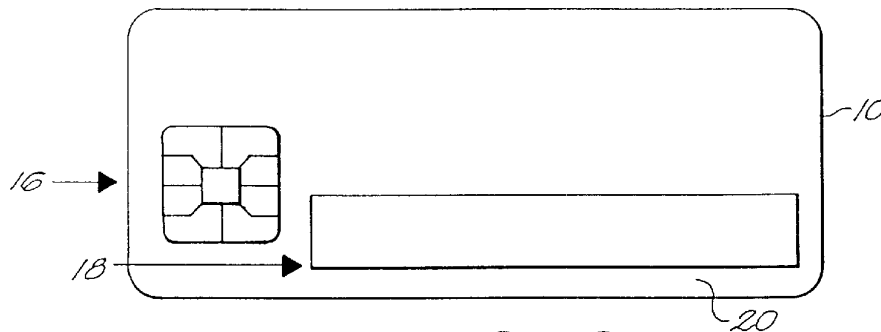


FIG. 2A

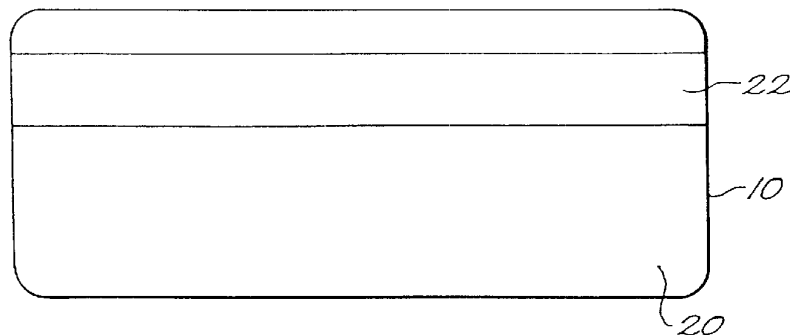


FIG. 2B

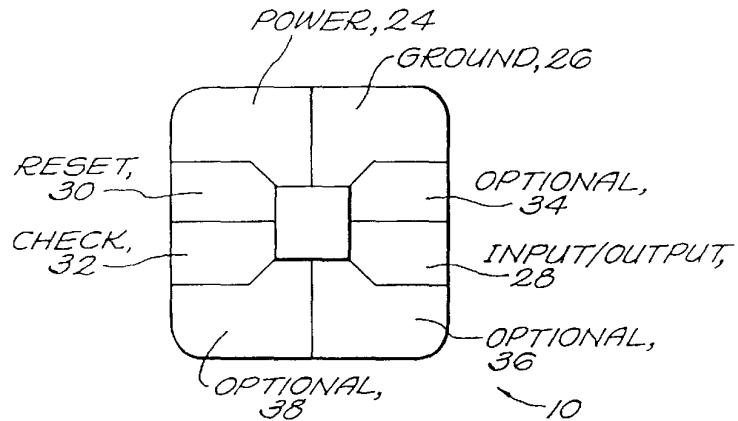


FIG. 2C

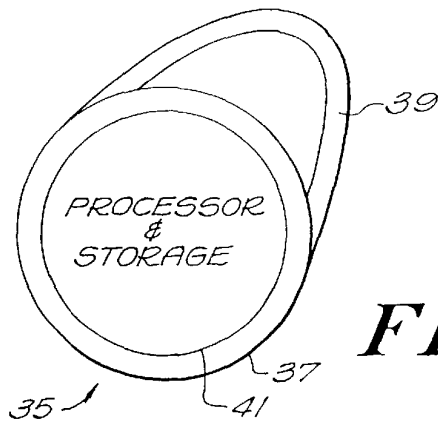


FIG. 3

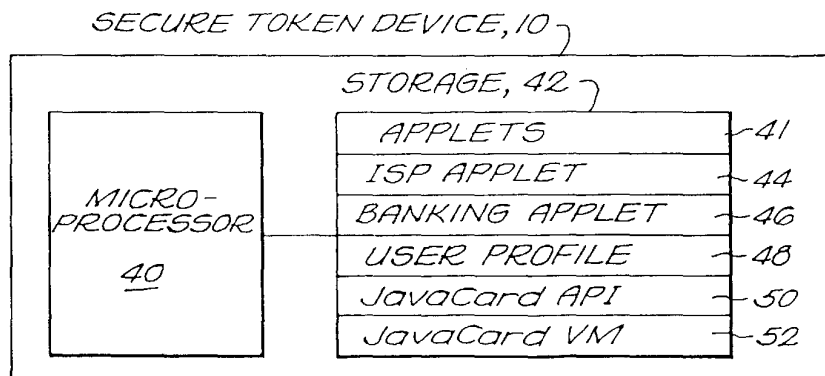


FIG. 4

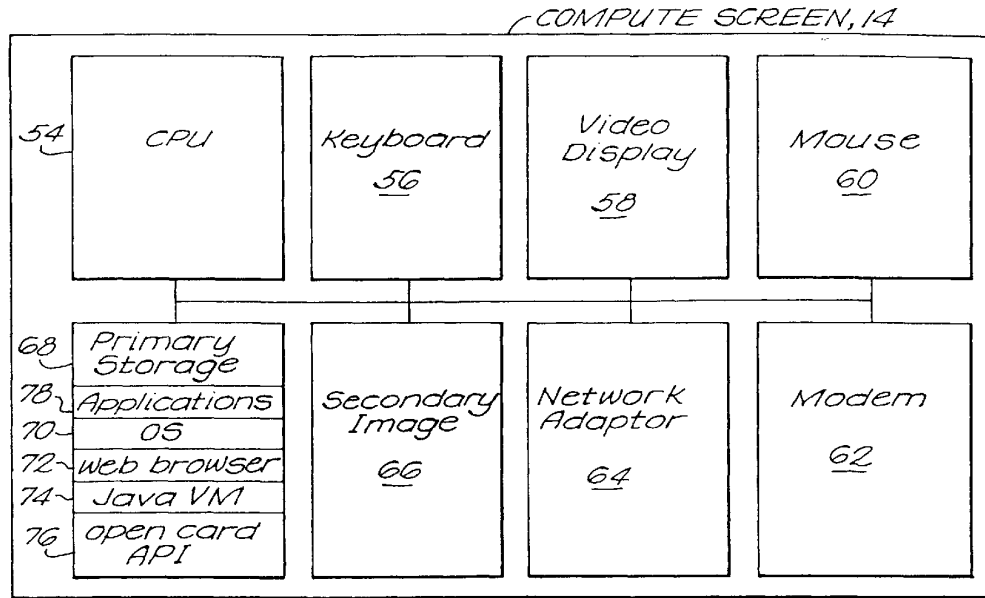


FIG. 5

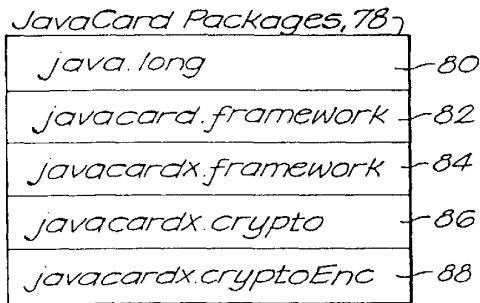


FIG. 6

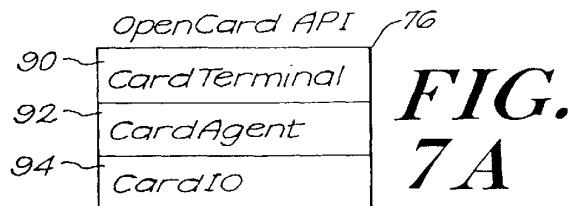


FIG. 7A

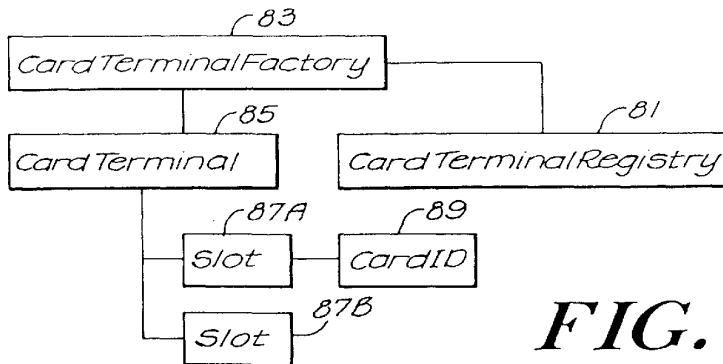


FIG. 7B

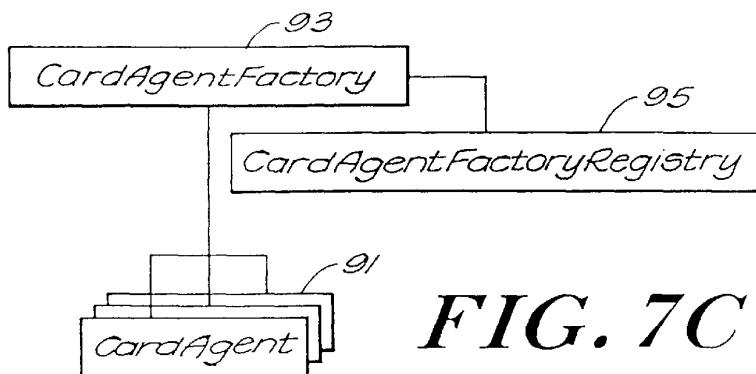


FIG. 7C

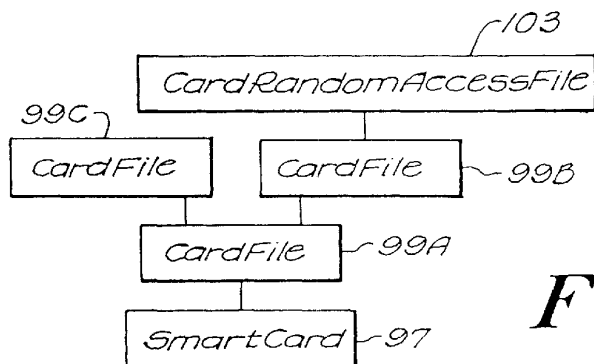


FIG. 7D

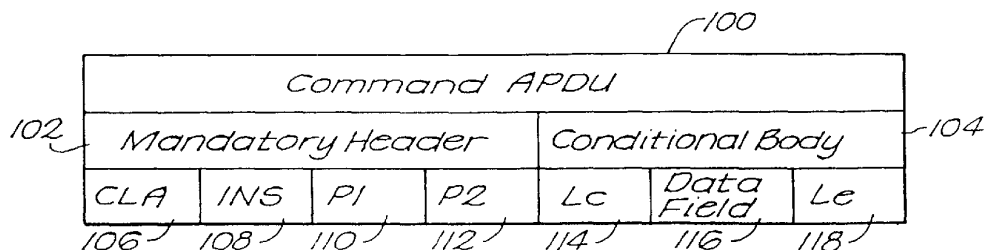


FIG. 8A

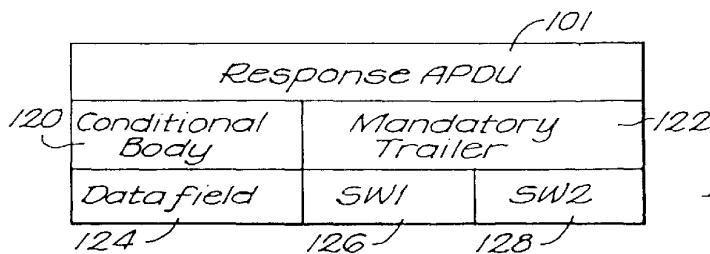


FIG. 8B

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