

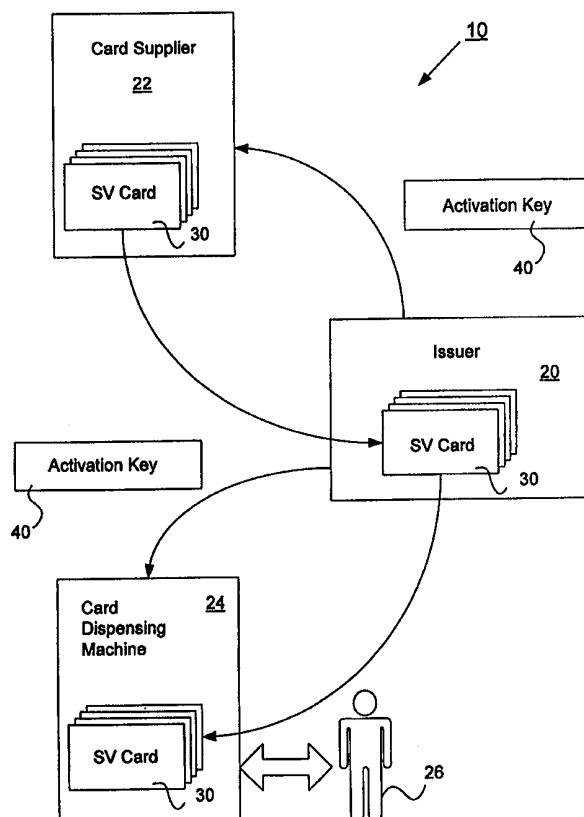


INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(51) International Patent Classification ⁶ : G07F 7/10	A3	(11) International Publication Number: WO 99/33033 (43) International Publication Date: 1 July 1999 (01.07.99)
(21) International Application Number: PCT/US98/27073 (22) International Filing Date: 18 December 1998 (18.12.98) (30) Priority Data: 60/068,196 19 December 1997 (19.12.97) US (71) Applicant (for all designated States except US): VISA INTERNATIONAL SERVICE ASSOCIATION [US/US]; 900 Metro Center Boulevard, Foster City, CA 94404 (US). (72) Inventors; and (75) Inventors/Applicants (for US only): DAVIS, Virgil, M. [US/US]; 1121 Runnymede Drive, Los Altos, CA 94024 (US). ROTH, Janet, R. [US/US]; 4629 Edgewood Avenue, Oakland, CA 94602 (US). (74) Agent: SCOTT, Jonathan, O.; Beyer & Weaver, LLP, P.O. Box 61059, Palo Alto, CA 94036 (US).		(81) Designated States: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZW, ARIPO patent (GH, GM, KE, LS, MW, SD, SZ, UG, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG). Published <i>With international search report.</i> <i>Before the expiration of the time limit for amending the claims and to be republished in the event of the receipt of amendments.</i> (88) Date of publication of the international search report: 7 October 1999 (07.10.99)

(54) Title: CARD ACTIVATION AT POINT OF DISTRIBUTION**(57) Abstract**

Secure activation of stored value cards (30) at a point of distribution uses a portable activation secure application module (ASAM) (208) within the card dispensing machine (24) to activate each card. Each card has a standard user mode and a security user mode. In the standard user mode the card is activated and ready for use. In the security user mode the card is not active and cannot be used to make a purchase. An issuer (20) supplies an issuer activation key (40) to a card supplier (22) who produces a security code (72) which is stored on a stored value card (30). Cards are supplied to the issuer (20) in security user mode, and stored in a dispensing machine (24). The issuer activation key (40) is also relayed to the dispensing machine and stored on the ASAM (208). Upon purchase by a customer (26), the issuer activation key (40) is used within the machine (24) by the ASAM (208) to reproduce the security code (72) and to activate a card. An activation control counter (ACC) is stored within the ASAM and is decremented for every attempt at activation of a card. ASAMs are maintained in the field using a dial-up connection to a central computer (202) with a control secure application module (CSAM) (206), or using a field secure application module (FSAM) (502) that is created at a central location using the CSAM (206). Each FSAM is able to update a limited number of ASAMs. A hierarchy of keys (600) is used by the CSAM, the FSAMs and ASAMs to ensure security.



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INTERNATIONAL SEARCH REPORT

International Application No

PCT/US 98/27073

A. CLASSIFICATION OF SUBJECT MATTER
IPC 6 G07F7/10

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC 6 G07F

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category °	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	US 5 696 908 A (SINEK RICHARD ET AL) 9 December 1997 (1997-12-09) abstract column 3, line 10 - last last column 5, line 13 - column 7, line 37 claims; figures ---	1-9
Y	WO 96 28796 A (SCHLUMBERGER IND SA ;KOEBERLE THIERRY (FR); RIGAL VINCENT (FR)) 19 September 1996 (1996-09-19) the whole document ---	1-4,6-9
Y	EP 0 768 628 A (FUJITSU LTD) 16 April 1997 (1997-04-16) column 2, line 50 - column 3, line 25 column 6, line 39 - column 7, line 47 claim 2; figures 1,2 --- -/--	5



Further documents are listed in the continuation of box C.



Patent family members are listed in annex.

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O document referring to an oral disclosure, use, exhibition or other means

P document published prior to the international filing date but later than the priority date claimed

T later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention

X document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

Y document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.

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Date of the actual completion of the international search

18 May 1999

Date of mailing of the international search report

25. 08. 1999

Name and mailing address of the ISA

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INTERNATIONAL SEARCH REPORT

International Application No
PCT/US 98/27073

C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category °	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	WO 91 01538 A (CASH CARD SYSTEMS) 7 February 1991 (1991-02-07) abstract page 9, line 16 - page 12, last last page 17, line 15 - page 18, line 28 ---	1-9
A	US 5 350 907 A (SJOEBLOM HANS O) 27 September 1994 (1994-09-27) abstract; claims; figures ---	1-9
A	EP 0 440 800 A (NTT DATA TSUSHIN KK) 14 August 1991 (1991-08-14) -----	

INTERNATIONAL SEARCH REPORT

International application No.

PCT/US 98/ 27073

Box I Observations where certain claims were found unsearchable (Continuation of item 1 of first sheet)

This International Search Report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:

1. ☐ Claims Nos.:
because they relate to subject matter not required to be searched by this Authority, namely:
2. ☐ Claims Nos.:
because they relate to parts of the International Application that do not comply with the prescribed requirements to such an extent that no meaningful International Search can be carried out, specifically:
3. ☐ Claims Nos.:
because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a).

Box II Observations where unity of invention is lacking (Continuation of item 2 of first sheet)

This International Searching Authority found multiple inventions in this international application, as follows:

see additional sheet

1. ☐ As all required additional search fees were timely paid by the applicant, this International Search Report covers all searchable claims.
2. ☐ As all searchable claims could be searched without effort justifying an additional fee, this Authority did not invite payment of any additional fee.
3. ☐ As only some of the required additional search fees were timely paid by the applicant, this International Search Report covers only those claims for which fees were paid, specifically claims Nos.:
4. ☒ No required additional search fees were timely paid by the applicant. Consequently, this International Search Report is restricted to the invention first mentioned in the claims; it is covered by claims Nos.:

1-9

Remark on Protest

- ☐ The additional search fees were accompanied by the applicant's protest.
- ☐ No protest accompanied the payment of additional search fees.

INTERNATIONAL SEARCH REPORT

International Application No. PCT/US 98/27073

FURTHER INFORMATION CONTINUED FROM PCT/ISA/ 210

1. Claims: 1-9

System and method for securely activating a stored value card at a point of distribution.

2. Claims: 10-15

System and method for creating an activation secure module for activating a stored value card.

3. Claims: 16-23

System and method for maintaining in the field an activation secure module useful for activating a stored value card.

INTERNATIONAL SEARCH REPORT

Information on patent family members

International Application No

PCT/US 98/27073

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