

(19) World Intellectual Property Organization
International Bureau



(43) International Publication Date
26 September 2002 (26.09.2002)

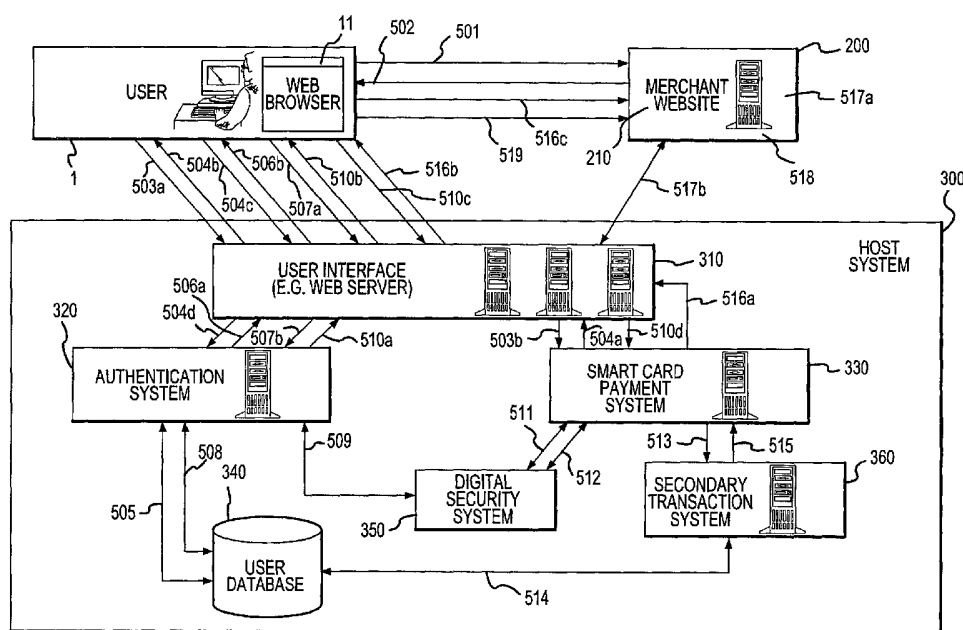
PCT

(10) International Publication Number
WO 02/075478 A3

- (51) International Patent Classification⁷: **G06F 17/60**, H04K 1/00, H04L 9/00
- (21) International Application Number: PCT/US01/46033
- (22) International Filing Date:
15 November 2001 (15.11.2001)
- (25) Filing Language: English
- (26) Publication Language: English
- (30) Priority Data:
60/276,173 15 March 2001 (15.03.2001) US
09/943,658 30 August 2001 (30.08.2001) US
- (71) Applicant: **AMERICAN EXPRESS TRAVEL RELATED SERVICES COMPANY, INC.** [US/US]; American Express Tower, World Financial Center, New York City, NY 10285-4900 (US).
- (72) Inventors: **HOBSON, Carol, Lee**; 43923 North 18th Street, New River, AZ 85087 (US). **HUSSAIN, Sohail, M.**; 8659 Evia Dela Gente, Scottsdale, AZ 85258 (US).
- (74) Agents: **SOBELMAN, Howard, I.** et al.; Snell & Wilmer L.L.P., One Arizona Center, 400 East Van Buren, Phoenix, AZ 85004-2202 (US).
- (81) Designated States (*national*): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, 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, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZW.
- (84) Designated States (*regional*): ARIPO patent (GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, 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, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).
- Published:**
— with international search report

[Continued on next page]

(54) Title: METHOD FOR PERFORMING SECURE ONLINE PAYMENT TRANSACTIONS



(57) Abstract: An online smart card (330) transaction system facilitates smart card (330) transactions with a merchant (200) over a public network. A host system (300) is configured to accept authentication data (320) from a user via an authentication device (320). The host system (300), after authenticating a user, is configured to retrieve the user's account information from a user database (340) system and translate a user account number into a temporary transaction number. The temporary transaction number is then transmitted directly from the host system (300) to the merchant (200), thereby eliminating the need for the user to send to the merchant over the internet, the user's transaction account number.



(88) Date of publication of the international search report:
13 February 2003

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

INTERNATIONAL SEARCH REPORT

International application No.

PCT/US01/46033

A. CLASSIFICATION OF SUBJECT MATTER

IPC(7) : G06F 17/60; H04K 1/00; H04L 9/00

US CL : 705/79

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)

U.S. : 705/64, 75, 76, 77, 79

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 practicable, search terms used)
Please See Continuation Sheet

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 5,883,810 (FRANKLIN et al) 16 March 1999 (16.03.1999), see entire document.	1-34
X	US 6,000,832 (FRANKLIN et al) 14 December 1999 (14.12.1999), see entire document.	1-34
X,P	US 2001/0034720 A1 (ARMES) 25 October 2001 (25.10.2001), see entire document.	1-34
X,E	US 2001/0044787 A1 (SHWARTZ et al) 22 November 2001 (22.11.2001), see entire document.	1-34
X,E	US 2002/0007320 A1 (HOGAN et al) 17 January 2002 (17.01.2002), see entire document.	1-34
X,E	US 2002/0035548 A1 (HOGAN et al) 21 March 2002 (21.03.2002), see entire document.	1-34
X,E	US 2002/0046092 A1 (OSTROFF) 18 April 2002 (18.04.2002), see entire document.	1-34

☐ Further documents are listed in the continuation of Box C.

☐ See patent family annex.

* Special categories of cited documents:

"A" document defining the general state of the art which is not considered to be of particular relevance

"E" earlier application or patent published on or after the international filing date

"L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)

"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

"&"

document member of the same patent family

Date of the actual completion of the international search

28 June 2002 (28.06.2002)

Date of mailing of the international search report

12 SEP 2002

Name and mailing address of the ISA/US
Commissioner of Patents and Trademarks
Box PCT
Washington, D.C. 20231

Facsimile No. (703)305-3230

Authorized officer

Emanuel T. Voeltz

Telephone No. 703-305-3900

DEBORAH THOMAS
PARALEGAL SPECIALIST

INTERNATIONAL SEARCH REPORT

International application No.

PCT/US01/46033

Continuation of Item 4 of the first sheet:

Existing title is vague and ambiguous.

NEW TITLE:

METHOD FOR PERFORMING SECURE ONLINE PAYMENT TRANSACTIONS

Continuation of B. FIELDS SEARCHED Item 3:

YAHOO, GOOGLE

search terms: secure payment transactions temporary account number authentication merchant smart card