

(19) World Intellectual Property Organization
International Bureau



(43) International Publication Date
11 April 2002 (11.04.2002)

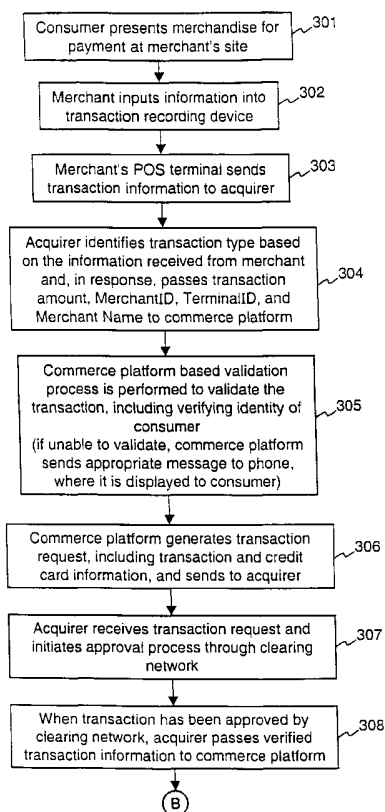
PCT

(10) International Publication Number
WO 2002/029739 A3

- (51) International Patent Classification⁷: **G07F 19/00**, 7/08, 7/10
- (21) International Application Number: PCT/US2001/041773
- (22) International Filing Date: 17 August 2001 (17.08.2001)
- (25) Filing Language: English
- (26) Publication Language: English
- (30) Priority Data:
60/238,760 6 October 2000 (06.10.2000) US
09/759,627 12 January 2001 (12.01.2001) US
- (71) Applicant (for all designated States except US): **OPEN-WAVE SYSTEMS, INC.** [US/US]; 1400 Seaport Boulevard, Office # W4152, Redwood City, CA 94063 (US).
- (72) Inventors; and
- (75) Inventors/Applicants (for US only): **NOBREGA, Ryan**, J. [US/US]; 2728 Waltham Cross, Belmont, CA 94002 (US). **VALLOPILLIL, Vinod, V.** [US/US]; 1025 Monterey Avenue, Foster City, CA 94404 (US).
- (74) Agent: **MALLIE, Michael, J.**; Blakely, Sokoloff, Taylor & Zafman LLP, 7th Floor, 12400 Wilshire Boulevard, Los Angeles, CA 90025 (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, US, UZ, VN, YU, ZA, ZW.
- (84) Designated States (regional): ARIPO patent (GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, 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, TR), OAPI patent (BF, BJ, CF,

[Continued on next page]

(54) Title: METHOD AND APPARATUS FOR PERFORMING A CREDIT BASED TRANSACTION BETWEEN A USER OF A WIRELESS COMMUNICATIONS DEVICE AND A PROVIDER OF A PRODUCT OR SERVICE



(57) Abstract: A wireless telecommunications carrier operates a commerce platform in a trusted domain, which may store sensitive information associated with a consumer. During a credit card based transaction, a merchant's POS terminal sends transaction information to an acquirer. The acquirer recognizes the transaction type and responds by routing the transaction information to the commerce platform. The commerce platform validates the transaction by verifying the identity of the user. When the transaction is validated, the commerce platform notifies the acquirer, which initiates a clearing process. When the transaction clears, the acquirer notifies the commerce platform and signals the merchant's POS terminal to output a paper receipt. The commerce platform stores a digital receipt of the transaction and signals the wireless device to output a confirmation message to the consumer. The consumer's credit card number and other sensitive information may be restricted to the trusted domain, which excludes the merchant.

WO 2002/029739 A3



CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD,
TG).

(88) **Date of publication of the international search report:**
8 January 2004

Published:

— *with international search report*

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/US 01/41773

A. CLASSIFICATION OF SUBJECT MATTER

IPC 7 G07F19/00 G07F7/08 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 7 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)

EPO-Internal, WPI Data, PAJ, INSPEC

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	WO 99 23617 A (KREMER ET AL.) 14 May 1999 (1999-05-14) page 2, line 15 - page 10, line 32 page 12, line 29 - page 46, line 17; figures 1-13	1-8, 17-32, 39,40, 50-56
X	US 5 668 876 A (FALK ET AL.) 16 September 1997 (1997-09-16) column 1, line 66 - column 2, line 41	1-8,17, 24,39,50
A	column 2, line 66 - column 9, line 4; figures 1-3	18-23, 25-32, 51-56
	----- -/--	

 Further documents are listed in the continuation of box C. Patent family members are listed in 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 document but 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

13 June 2003

Date of mailing of the international search report

23. 09. 2003

Name and mailing address of the ISA

European Patent Office, P.B. 5818 Patentlaan 2
NL - 2280 HV Rijswijk
Tel. (+31-70) 340-2040, Tx. 31 651 epo nl,
Fax: (+31-70) 340-3016

Authorized officer

Rivero C.G.

INTERNATIONAL SEARCH REPORT

International Application No

PCT/US 01/41773

C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT		
Category °	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X A	EP 0 745 961 A (AT&T IPM CORP.) 4 December 1996 (1996-12-04) column 5, line 15 - column 19, line 19; figures 1-14	1,17,24, 39,50 2-8, 18-23, 25-32, 51-56
X A	----- US 5 724 423 A (KHELLO) 3 March 1998 (1998-03-03) column 5, line 46 - column 14, line 14; figures 1-11	1 17,24, 39,50
A	----- WO 96 13814 A (VAZVAN) 9 May 1996 (1996-05-09) page 3, line 7 - page 7, line 29; figures 1-3	1,17,24, 39,50
A	----- US 5 343 529 A (GOLDFINE ET AL.) 30 August 1994 (1994-08-30) column 3, line 36 - column 8, line 8; figures 1-6	1,17,24, 39,50
A	----- EP 0 532 231 A (AMERICAN TELEPHONE AND TELEGRAPH COMPANY) 17 March 1993 (1993-03-17) column 4, line 45 - column 14, line 25; figures 1-11	1

INTERNATIONAL SEARCH REPORT

International application No.
PCT/US 01/41773

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.:

1-8, 17-32, 39-40, 50-56

Remark on Protest

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

FURTHER INFORMATION CONTINUED FROM PCT/ISA/ 210

This International Searching Authority found multiple (groups of) inventions in this international application, as follows:

1. claims: 1-8 17-32 39-40 50-56

A method of facilitating a credit card transaction between a consumer and a provider of a product or service comprising a telecommunications carrier that provides the consumer with a wireless communication device and validates a credit card transaction between the consumer and the provider.

2. claims: 9-16 33-38 46-49

A method of facilitating a credit based transaction between a consumer and a provider of a product or service comprising the steps of storing credit account information within a trusted domain excluding both consumer and provider and using such information to validate a transaction between user and provider without sending the account information outside the trusted domain.

3. claims: 41-45

A method of facilitating a credit card transaction between a consumer and a provider of a product or service comprising the steps of: a) providing a computer implemented portal; b) storing personal information of the consumer within a trusted domain; c) generating session identifiers corresponding to a particular transaction; d) receiving confidential personal identification code and user-input session identifier from a wireless communication device to verify identity of a user; e) processing the above mentioned data using a clearing network to validate, authorize, and finally confirm completion of the transaction.

INTERNATIONAL SEARCH REPORT

Information on patent family members

International Application No

PCT/US 01/41773

Patent document cited in search report		Publication date	Patent family member(s)	Publication date
WO 9923617	A	14-05-1999	FR 2771875 A1	04-06-1999
			AU 1158899 A	24-05-1999
			EP 1104921 A2	06-06-2001
			EP 1103935 A2	30-05-2001
			EP 1107203 A2	13-06-2001
			EP 1050025 A2	08-11-2000
			WO 9923617 A2	14-05-1999

US 5668876	A	16-09-1997	AU 692881 B2	18-06-1998
			AU 2688795 A	19-01-1996
			CA 2193819 A1	04-01-1996
			CN 1156531 A ,B	06-08-1997
			EP 0766902 A2	09-04-1997
			FI 965161 A	13-02-1997
			JP 10502195 T	24-02-1998
			WO 9600485 A2	04-01-1996

EP 0745961	A	04-12-1996	US 5708422 A	13-01-1998
			CA 2176163 A1	01-12-1996
			DE 69617097 D1	03-01-2002
			DE 69617097 T2	20-06-2002
			EP 0745961 A2	04-12-1996
			JP 8339407 A	24-12-1996

US 5724423	A	03-03-1998	AU 705145 B2	13-05-1999
			AU 7005296 A	09-04-1997
			BR 9610652 A	17-02-1999
			CA 2230978 A1	27-03-1997
			CN 1201545 A	09-12-1998
			DE 69617447 D1	10-01-2002
			DE 69617447 T2	04-04-2002
			EP 0852044 A1	08-07-1998
			ES 2168503 T3	16-06-2002
			JP 11514467 T	07-12-1999
			WO 9711443 A1	27-03-1997
			TW 384593 B	11-03-2000

WO 9613814	A	09-05-1996	FI 945075 A	29-04-1996
			AT 211283 T	15-01-2002
			DE 69524733 D1	31-01-2002
			DE 69524733 T2	14-08-2002
			DK 739526 T3	15-04-2002
			EP 1178450 A2	06-02-2002
			EP 0739526 A1	30-10-1996
			ES 2170166 T3	01-08-2002
			FI 962553 A	13-09-2002
			FI 962961 A	28-08-1996
			FI 971009 A	26-04-1997
			FI 971248 A	26-04-1997
			FI 971848 A	30-04-1997
			WO 9613814 A1	09-05-1996
PT 739526 T	28-06-2002			

US 5343529	A	30-08-1994	NONE	

EP 0532231	A	17-03-1993	US 5153919 A	06-10-1992
			DE 69231327 D1	14-09-2000
			DE 69231327 T2	04-01-2001

INTERNATIONAL SEARCH REPORT

Information on patent family members

International Application No

PCT/US 01/41773

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
EP 0532231	A	EP 0532231 A2	17-03-1993
		FI 924091 A	14-03-1993
		JP 2675494 B2	12-11-1997
		JP 6195024 A	15-07-1994
