(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property Organization

International Bureau





(43) International Publication Date 20 January 2005 (20.01.2005)

PCT

(10) International Publication Number WO 2005/004576 A3

(51) International Patent Classification⁷: G06F 17/60

(21) International Application Number:

PCT/US2004/020559

(22) International Filing Date: 25 June 2004 (25.06.2004)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:

10/610,439 30 June 2003 (30.06.2003) US

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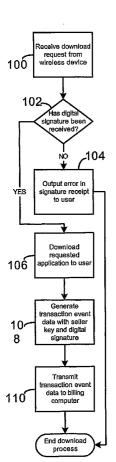
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- (81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, 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, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.
- (84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM,

[Continued on next page]

(54) Title: BILLING SYSTEM WITH AUTHENTICATED WIRELESS DEVICE TRANSACTION EVENT DATA



(57) Abstract: A system, method, and computer program for billing wireless device subscribers based upon billable interaction with applications and services resident on third party computer devices that are accessible through a wireless network. The system uses authenticatable transaction data that is created when a wireless device conducts a billable transaction whereby the data is a secure indication that a wireless device has performed a specific billable transaction event. The transaction data can be authenticated and then aggregated to generate billing for billable transaction events that occur on the wireless network. The billing can occur from a billing computer on the network or the aggregated data can be sent to a wireless service provider for ultimate billing to the wireless device subscriber.

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ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Declarations under Rule 4.17:

— as to applicant's entitlement to apply for and be granted a patent (Rule 4.17(ii)) for the following designations AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, 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, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, UZ, VC, VN, YU, ZA, ZM, ZW, ARIPO patent (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE,

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- as to the applicant's entitlement to claim the priority of the earlier application (Rule 4.17(iii)) for all designations

Published:

- with international search report
- before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments
- (88) Date of publication of the international search report: 12 May 2005

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.

		ĺ	PC1/USU4/20559		
A. CLASSIFICATION OF SUBJECT MATTER					
IPC(7) : G06F 17/60					
US CL: 705/034 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.: 705/034 705/030,029,040,044					
0.5 105/054 105/050,025,040,044					
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 *				Relevant to claim No.	
X,P	US 2004/0043753 A1 (Wake et al.) 04 March 2004, see entire document.			1-7,9-19,21-46,48-54	
	ob 200 1/00 15/55 TH (Water of all.) of Printed 2001, 500 office document.				
Y,P				8,20,47	
Y	IIC (072 124 A (Vaidure et al.) OC Time 2000 entire de coment			9 20 47	
1	US 6,073,124 A (Krishnan et al.) 06 June 2000, see entire document.			8,20,47	
Α	US 2001/0034704 A1 (Farhat et al.) 25 October 2001.			1-54	
` A	US 2001/0034693 A1 (Farhat et al.) 25 October 2001.			1-54	
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Further	documents are listed in the continuation of Box C.	See patent fa	mily annex.		
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priority date claimed					
Date of the ac	tual completion of the international search	Date of mailing of the	International searc	en report	
18 February 2005 (18.02.2005) 11 MAR 2005					
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Pacsimile No. (703) 305-3230					

INTERNATIONAL SEARCH REPORT	International application No. PCT/US04/20559			
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