(19) World Intellectual Property Organization

International Bureau





(43) International Publication Date 31 December 2008 (31.12.2008)

(10) International Publication Number WO 2009/002980 A3

(51) International Patent Classification: G06Q 20/00 (2006.01)

(21) International Application Number:

PCT/US2008/068040

(22) International Filing Date: 24 June 2008 (24.06.2008)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:

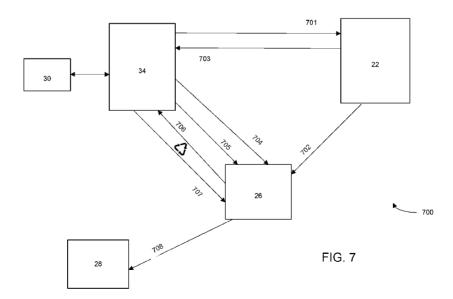
US 60/946,113 25 June 2007 (25.06.2007) 61/034,904 7 March 2008 (07.03.2008) US 12/143,394 20 June 2008 (20.06.2008) US

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- (81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AO, AT, AU, AZ, BA, BB, BG, BH, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DO, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LY, MA, MD, ME, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, SV, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, 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, 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, HR, HU, IE, IS, IT, LT, LU, LV, MC, MT, NL, NO, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

[Continued on next page]

(54) Title: CARDLESS CHALLENGE SYSTEMS AND METHODS



(57) Abstract: Systems, methods, and apparatus for handling and/or authorizing payment requests by a consumer for a transaction are provided. Challenge questions may be presented from the non-merchant to the consumer after receiving the payment information, thereby allowing a judicious determination of when to ask such challenge questions and allowing complex and probative questions. The time limit for such challenge questions may advantageously be unconstrained, while still preserving security. Also, a risk analysis may be started prior to the consumer submitting payment information, thus allowing an efficient and complex risk analysis. Information about an access device used by the consumer may be obtained at the non-merchant from the access device with code sent to the access device from the merchant, and the device information may be used in the risk analysis.



WO 2009/002980 A3



Published:

(88) Date of publication of the international search report:

26 February 2009

- 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

International application No. **PCT/US2008/068040**

A. CLASSIFICATION OF SUBJECT MATTER

G06Q 20/00(2006.01)i

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)

IPC8 G06F19/00, G06F17/00, G06Q10/00-99/00

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched Korean Utility models and applications for Utility models since 1975

Japanese Utility models and applications for Utility models since 1975

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used) PAJ, FPD, USPAT, eKIPASS "Keyword: payment, transaction, authorize, fraud, server, score"

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	US 7,165,051 B2 (RONNING, JOEL A. et al.) 16 JANURY 2007. See the abstract; column 2, line 53 - column 17, line 59; figures 5-8.	1-32
Y	US 6,157,707 A (BAULIER, GERALD DONALD et al.) 5 DECEMBER 2000. See the abstract; column 3, line 66 - column 11, line 45; figures 1, 2.	1-32
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A	US 6,732,082 B1 (GAVAN, JOHN et al.) 4 MAY 2004. See the abstract; column 2, line 22 - column 31, line 30; figures 4-12.	1-32

	Further documents are	listed in the	e continuation	of Box C.
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See patent family annex.

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- "&" document member of the same patent family

Date of the actual completion of the international search

09 JANUARY 2009 (09.01.2009)

Date of mailing of the international search report

09 JANUARY 2009 (09.01.2009)

Name and mailing address of the ISA/KR



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Facsimile No. 82-42-472-7140

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Telephone No. 82-42-481-5960



INTERNATIONAL SEARCH REPORT

Information on patent family members

International application No.

PCT/US2008/068040

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