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

(19) World Intellectual Property Organization
International Bureau

(43) International Publication Date
22 January 2015 (22.01.2015)

WIPO | PCT

(10) International Publication Number
WO 2015/009477 A1

(51) International Patent Classification:
G06Q 20/40 (2012.01) *G06Q 20/34* (2012.01)
G06Q 20/42 (2012.01)

(21) International Application Number:
PCT/US2014/045598

(22) International Filing Date:
7 July 2014 (07.07.2014)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
13/943,461 16 July 2013 (16.07.2013) US

(71) Applicant: **MASTERCARD INTERNATIONAL INCORPORATED** [US/US]; 2000 Purchase Street, Purchase, New York 10577 (US).

(72) Inventors: **GROARKE, Peter J.**; 7 Mount Eagle Rise, Dublin, 18 (IE). **WIESMAN, Mark B.**; 1801 York Ridge Court, Chesterfield, Missouri 63017 (US). **CHISHOLM, John Delton**; 317 Willowick Drive, Ballwin, Missouri 63011 (US). **LONE, Ishfaq A.**; 33 Milpark, Clondalkin, Dublin, 18 (IE).

(74) Agents: **FITZGERALD, Daniel M.** et al.; Armstrong Teasdale LLP, 7700 Forsyth Blvd., Suite 1800, St. Louis, Missouri 63105-1847 (US).

(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, BN, BR, BW, BY, BZ, CA, CH, CL, 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, IR, IS, JP, KE, KG, 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, PA, PE, PG, PH, PL, PT, QA, RO, RS, RU, RW, SA, SC, SD, SE, SG, SK, SL, SM, ST, SV, SY, TH, 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, LR, LS, MW, MZ, NA, RW, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, RU, TJ, TM), European (AL, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HR, HU, IE, IS, IT, LT, LU, LV, MC, MK, MT, NL, NO, PL, PT, RO, RS, SE, SI, SK, SM,

[Continued on next page]

(54) Title: SYSTEMS AND METHODS FOR CORRELATING CARDHOLDER IDENTITY ATTRIBUTES ON A PAYMENT CARD NETWORK TO DETERMINE PAYMENT CARD FRAUD

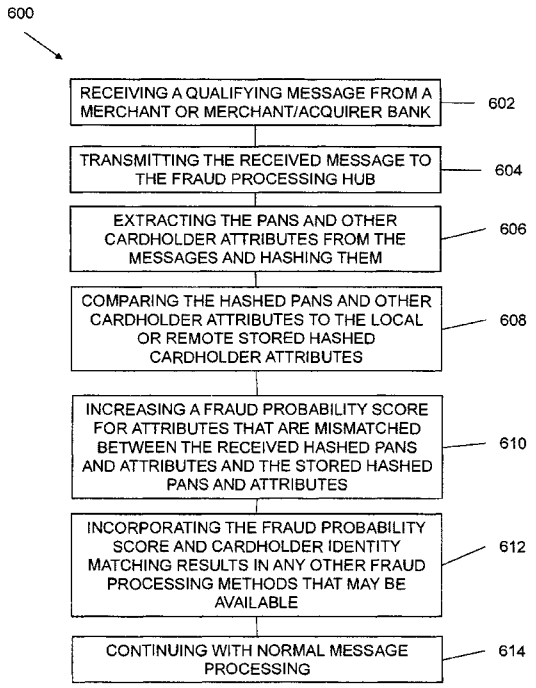


FIGURE 6

(57) Abstract: A method and system for correlating cardholder identity attributes on a payment card interchange network using a computer device coupled to a database are provided. The method includes storing at a central store, personally identifiable information from an issuer for a plurality of payment card cardholders, the personally identifiable information encrypted to prevent payment card transaction data from being associated with the personally identifiable information, receiving, from a merchant, personally identifiable information during a payment card transaction, encrypting the received personally identifiable information, and comparing the encrypted stored personally identifiable information to the encrypted received personally identifiable information to determine a risk of fraud during the payment card transaction.

WO 2015/009477 A1

TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, KM, ML, MR, NE, SN, TD, TG).

Published:

— *with international search report (Art. 21(3))*

— *before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments (Rule 48.2(h))*