

(51) International Patent Classification:
G06Q 99/00 (2006.01)(21) International Application Number:
PCT/US2013/024538(22) International Filing Date:
2 February 2013 (02.02.2013)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
61/594,063 2 February 2012 (02.02.2012) US
13/520,481 3 July 2012 (03.07.2012) US(71) Applicant: VISA INTERNATIONAL SERVICE ASSO-
CIATION [US/US]; P.O. Box 8999, MS M1-11F, San
Francisco, California 94128-8999 (US).(72) Inventors: FAITH, Patrick; 2810 Jones Gate Court,
Pleasanton, California 94566 (US). HARRIS, Theodore;
199 Tiffany Avenue, Unit 209, San Francisco, California
94110 (US).(74) Agent: HANCHUK, Walter; Cooley LLP, Attn: Patent
Group, 1299 Pennsylvania Avenue, NW, Suite 700, Wash-
ington, District of Columbia 20004 (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, 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, PA, PE, PG, PH, PL, PT, QA, RO, RS, RU,
RW, 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,
TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW,
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))

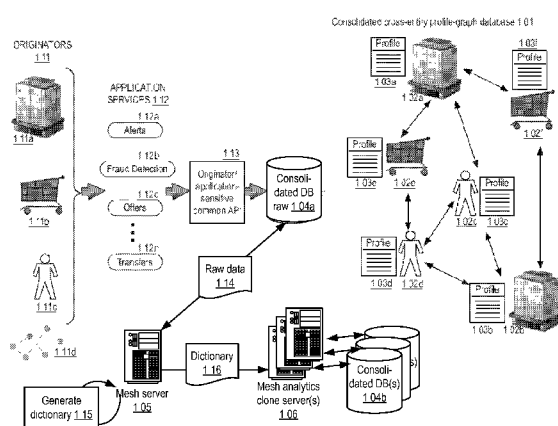
(54) Title: MULTI-SOURCE, MULTI-DIMENSIONAL, CROSS-ENTITY, MULTIMEDIA DATABASE PLATFORM APPAR-
ATUSES, METHODS AND SYSTEMS

FIGURE 1

Example: User Services Usage Attributes Data Model

(57) **Abstract:** The MULTI-SOURCE, MULTI-DIMENSIONAL, CROSS-ENTITY, MULTIMEDIA DATABASE PLATFORM APPARATUSES, METHODS AND SYSTEMS (MMCDB) transform data aggregated from various computer resources using MMCDB components into updated entity profiles and/or social graphs. MMCDB aggregates data records including search results, purchase transaction data, service usage data, service enrollment data, and social data. Identifies data field types within the data records and their associated data values. From the data field types and their associated data values, MMCDB identifies an entity. MMCDB generates correlations of the entity to other entities identifiable from the data field types and their associated data values. Associates attributes to the entity by drawing inferences related to the entity from data field types and associated data values. Using generated correlations and associated attributes, MMCDB generates an updated profile and social graph of the entity. Provides the updated profile and social graph for an automated web form filling request.