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

(19) World Intellectual Property Organization
International Bureau

(43) International Publication Date
28 June 2012 (28.06.2012)

WIPO | PCT

(10) International Publication Number
WO 2012/087909 A3

(51) International Patent Classification:
*G06Q 30/02* (2012.01) *G06Q 50/30* (2012.01)

(21) International Application Number:
PCT/US2011/065797

(22) International Filing Date:
19 December 2011 (19.12.2011)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
61/425,564 21 December 2010 (21.12.2010) US

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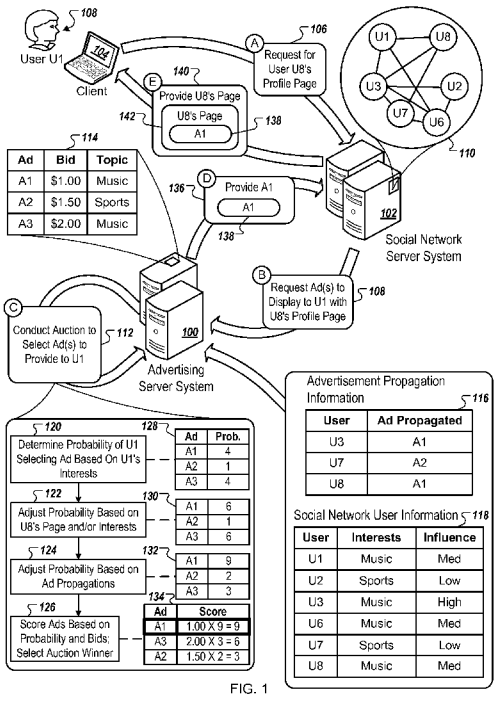
(81) Designated States *(unless otherwise indicated, for every kind of national protection available)*: AE, AG, AL, AM, AO, AT, AU, AZ, BA, BB, BG, BH, BR, BW, BY, BZ, CA, CH, CL, CN, CO, CR, CU, CZ, DE, DK, DM, DO, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IS, JP, KE, KG, 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, 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, MD, 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).

*[Continued on next page]*

(54) Title: PROVIDING ADVERTISEMENTS ON A SOCIAL NETWORK




| Ad | Bid | Topic |
|---|---|---|
| A1 | $1.00 | Music |
| A2 | $1.50 | Sports |
| A3 | $2.00 | Music |

| Ad | Prob. |
|---|---|
| A1 | 4 |
| A2 | 1 |
| A3 | 4 |

| Ad | |
|---|---|
| A1 | 6 |
| A2 | 1 |
| A3 | 6 |

| Ad | |
|---|---|
| A1 | 9 |
| A2 | 2 |
| A3 | 3 |

| Ad | Score |
|---|---|
| A1 | 1.00 X 9 = 9 |
| A3 | 2.00 X 3 = 6 |
| A2 | 1.50 X 2 = 3 |

| User | Ad Propagated |
|---|---|
| U3 | A1 |
| U7 | A2 |
| U8 | A1 |

| User | Interests | Influence |
|---|---|---|
| U1 | Music | Med |
| U2 | Sports | Low |
| U3 | Music | High |
| U6 | Music | Med |
| U7 | Sports | Low |
| U8 | Music | Med |

FIG. 1

(57) Abstract: In one implementation, a computer-implemented method includes receiving, at a server system, a request for an advertisement to provide to a first user of a social network, and determining, for each of a plurality of advertisements, a probability that the first user will select the advertisement based, at least in part, on previous propagations of the advertisement by one or more second users of the social network. The method can further include scoring, by the server system, the plurality of advertisements based upon the determined probabilities of selection by the first user and bids associated with the plurality of advertisements, and providing one or more of the plurality of advertisements for presentation to the first user based upon the scoring of the plurality of advertisements.

WO 2012/087909 A3

**Declarations under Rule 4.17**:

— *as to applicant's entitlement to apply for and be granted a patent (Rule 4.17(ii))*

— *as to the applicant's entitlement to claim the priority of the earlier application (Rule 4.17(iii))*

**Published**:

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

**(88) Date of publication of the international search report**:
27 September 2012

**INTERNATIONAL SEARCH REPORT**

International application No.
**PCT/US2011/065797**

**A. CLASSIFICATION OF SUBJECT MATTER**

***G06Q 30/02C0(2012.01)i, G06Q 50/30D0(2012.01)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)
G06Q 30/02C0; G06F 15/16; G06Q 30/00; G06F 17/30; G06Q 50/00; G06Q 10/00

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
Japanese utility models and applications for utility models

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)
eKOMPASS(KIPO internal) & Keywords: social network, advertisement, probability, user

**C. DOCUMENTS CONSIDERED TO BE RELEVANT**

| Category* | Citation of document, with indication, where appropriate, of the relevant passages | Relevant to claim No. |
|---|---|---|
| A | US 2010-0228631 A1 (ZHANG DONG et al.) 09 September 2010<br>See abstract, figures 1-7, and claims 1-3,6-8,15-20,24. | 1-20 |
| A | US 2009-0222315 A1 (HAYES, JR. RAYMOND FRANCIS) 03 September 2009<br>See abstract, figures 1-8 and claims 1-19. | 1-20 |
| A | KR 10-2009-0132331 A (SK COMMUNICATIONS CORP.) 30 December 2009<br>See abstract and pages 6-9. | 1-20 |
| A | KR 10-2009-0090818 A (LEE, MYUNG JONG et al.) 26 August 2009<br>See abstract and pages 4-7. | 1-20 |
| A | US 2009-0112701 A1 (TURPIN ANDREW MARTIN et al.) 30 April 2009<br>See abstract and figures 1-4. | 1-20 |

☐ Further documents are listed in the continuation of Box C.

☒ See patent family 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 application or patent but published on or after the international filing date
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"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
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"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 | Date of mailing of the international search report |
|---|---|
| 28 JUNE 2012 (28.06.2012) | **29 JUNE 2012 (29.06.2012)** |


Name and mailing address of the ISA/KR
Korean Intellectual Property Office
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Facsimile No. 82-42-472-7140

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Telephone No. 82-42-481-5781

**INTERNATIONAL SEARCH REPORT**

Information on patent family members

International application No.

**PCT/US2011/065797**

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