

(19) World Intellectual Property Organization
International Bureau



(43) International Publication Date
7 June 2007 (07.06.2007)

PCT

(10) International Publication Number
WO 2007/064641 A3

(51) International Patent Classification:
G06F 13/00 (2006.01)

(74) Agent: **GOTTLIEB, Kirk, A.**; Fish & Richardson P.C.,
P.O. Box 1022, Minneapolis, MN 55440-1022 (US).

(21) International Application Number:
PCT/US2006/045551

(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, GT, HN, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LV, LY, MA, MD, 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.

(22) International Filing Date:
27 November 2006 (27.11.2006)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
60/740,760 29 November 2005 (29.11.2005) US
60/823,881 29 August 2006 (29.08.2006) US

(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, HU, IE, IS, IT, LT, LU, LV, 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).

(71) Applicant (for all designated States except US):
GOOGLE INC. [US/US]; 1600 Amphitheatre Parkway, Mountain View, CA 94043 (US).

(72) Inventors; and

(75) Inventors/Applicants (for US only): **FINK, Michael** [US/US]; 17 Osborne Rd., Brookline, MA 02446 (US). **BALUJA, Shumeet** [US/US]; 853 East River Parkway, Santa Clara, CA 95054 (US). **COVELL, Michele** [US/US]; 2150 Dartmouth Street, Palo Alto, CA 94306 (US).

Published:
— with international search report

(88) Date of publication of the international search report:
14 May 2009

(54) Title: SOCIAL AND INTERACTIVE APPLICATIONS FOR MASS MEDIA

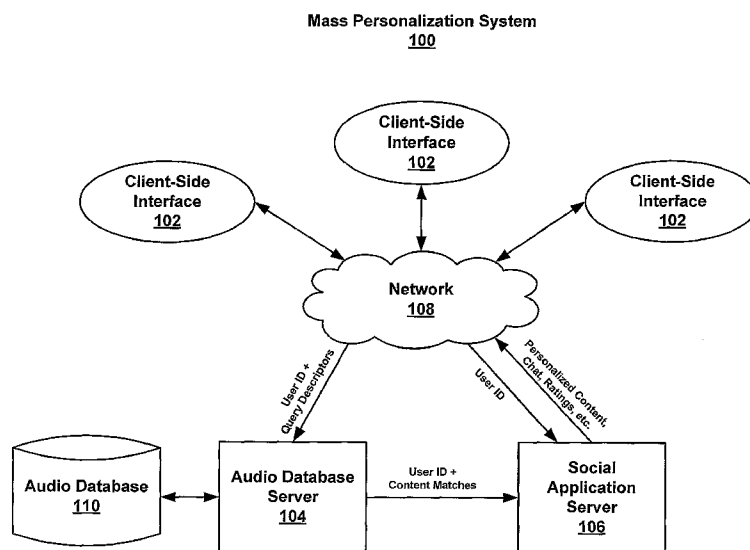


Figure 1

(57) Abstract: Systems, methods, apparatuses, user interfaces and computer program products provide social and interactive applications for mass media based on real-time ambient-audio and/or video identification. In some implementations, a method includes: receiving descriptors identifying ambient audio associated with a media broadcast; comparing the descriptors to one or more reference descriptors; and determining a rating for the media broadcast based at least in part on the results of the comparison.

WO 2007/064641 A3

INTERNATIONAL SEARCH REPORT

International application No.

PCT/US06/45551

A. CLASSIFICATION OF SUBJECT MATTER

IPC: **G06F 13/00** (2006.01)

USPC: 725/37

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. : 725/37

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)
EAST, PG-Pub, Google

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X --- Y	US 2005/0147256 A1 (Peters et al) 7 July 2005 (7-7-2005), Fig 1, paras 0013-0017	1,2,5,7,8,11-14, 17-19,21-25,28 ----- 3,4,6,9,10,15,16,20,26,27,29-60
Y	US 2002/0023020 A1 (Kenyon et al) 21 Feb 2002 (21-2-2002), Figs 12-14, para 0042	3,4,9,10,20,29-32,34,59,
Y	US 2003/0093790 A1 (Logan et al) 15 May 2003 (15-5-2003), paras 0130-0132.	6,15,16,26,33-60
Y	Yang, Chen. "MACS: Music Audio Characteristic Sequence Indexing for Similarity Retrieval", IEEE Workshop on Applications of Signal Processing to Audio and Acoustics 2001, Abstract.	27

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	"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
"E" earlier application or patent published on or after the international filing date	"X"	document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
"L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)	"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
"O" document referring to an oral disclosure, use, exhibition or other means		
"P" document published prior to the international filing date but later than the priority date claimed	"&"	document member of the same patent family

Date of the actual completion of the international search

13 June 2008 (13.06.2008)

Date of mailing of the international search report

21 JUL 2008

Name and mailing address of the ISA/US

Mail Stop PCT, Attn: ISA/US
Commissioner for Patents
P.O. Box 1450
Alexandria, Virginia 22313-1450

Facsimile No. (571) 273-3201

Authorized officer

Scott Beliveau

Telephone No. (571) 272-2600

INTERNATIONAL SEARCH REPORT

International application No.
PCT/US06/45551

C (Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	US 2002/0133499 A1 (Ward et al) 19 Sep 2002 (19-9-2002), Abstract.	32
Y	US 6585521 B1 (Obrador) 1 Jul 2003 (1-7-2003), Abstract.	57
Y	US 2004/0025174 A1 (Cerrato) 5 Feb 2004 (5-2-2004), Fig 2, paras 0029, 0039	60