

(19) World Intellectual Property Organization
International Bureau



(43) International Publication Date
10 May 2007 (10.05.2007)

PCT

(10) International Publication Number
WO 2007/053744 A3

- (51) International Patent Classification:
H04N 7/173 (2006.01)
- (21) International Application Number:
PCT/US2006/042797
- (22) International Filing Date:
1 November 2006 (01.11.2006)
- (25) Filing Language: English
- (26) Publication Language: English
- (30) Priority Data:

11/268,751	1 November 2005 (01.11.2005)	US
11/268,778	1 November 2005 (01.11.2005)	US
11/282,318	19 November 2005 (19.11.2005)	US
- (71) Applicant (for all designated States except US):
YESVIDEO, INC. [US/US]; 3281 Scott Boulevard,
Santa Clara, California 95054 (US).
- (72) Inventors; and
- (75) Inventors/Applicants (for US only): **FU, Sai-Wai**
[US/US]; 10520 Magdalena Road, Los Altos Hills, Cal-
ifornia 94024 (US). **KEATING, Brett** [US/US]; 708

Timor Court, San Jose, California 95127 (US). **VEDULA, Sundar** [IN/US]; 970 Corte Madera Court, #204, Sunnyvale, California 94085 (US). **WILSON, Kevin** [US/US]; 3078 Emerson Street, Palo Alto, California 94306 (US). **AHMAD, Subutai** [US/US]; 946 Colorado Street, Palo Alto, California 94303 (US).

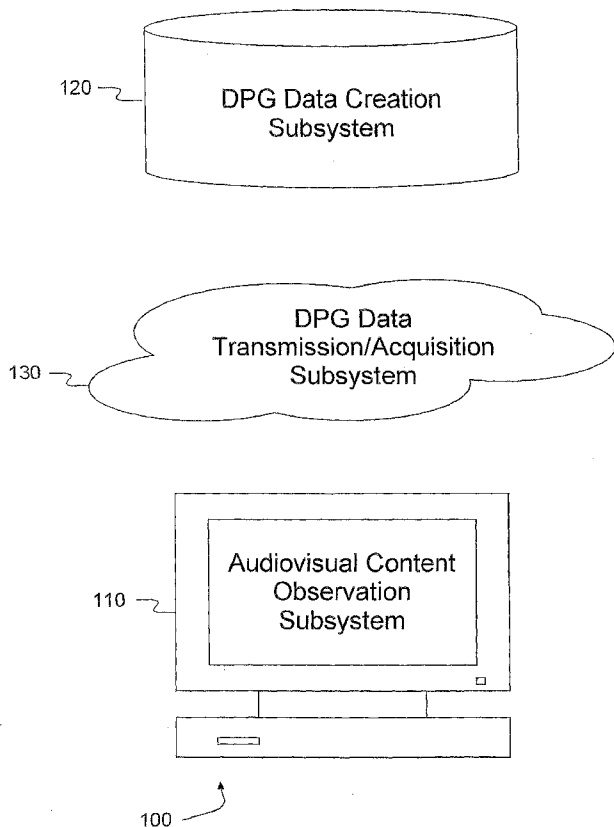
(74) Agent: **GRAHAM, David**; 1337 Chewpon Avenue, Milpitas, CA 95035 (US).

(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.

(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,

[Continued on next page]

(54) Title: INDEXING A RECORDING OF AUDIOVISUAL CONTENT TO ENABLE RICH NAVIGATION



(57) Abstract: The invention indexes an audiovisual recording to enable navigation within the audiovisual recording. In particular, the invention provides indexing within a "show" of a recording of an audiovisual broadcast (e.g., a television broadcast or a radio/satellite audio broadcast) that enables navigation within the show, in contrast to indexing among shows (i.e., identification of locations corresponding to the start and/or end of shows) that can enable navigation between shows. The invention also enables navigation among one or more intelligently selected segments of the recording in a non-linear manner. A graphical user interface can be implemented to effect navigation in accordance with the invention of a recording of audiovisual content.

WO 2007/053744 A3



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).

Published:

- *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*

(88) Date of publication of the international search report:
22 November 2007

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

INTERNATIONAL SEARCH REPORT

International application No.
PCT/US 06/42797

A. CLASSIFICATION OF SUBJECT MATTER
IPC(8): H04N 7/173 (2007.01)
USPC: 725/134
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)
IPC(8): H04N 7/173 (2007.01)
USPC: 725/134

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched
USPC: 725/89,142

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)
Electronic databases: USPTO WEST (PGPB, USPT, EPAB, JPAB); DIALOG PRO
Search Terms Used: audiovisual broadcast or show or content, indexing or navigating, data structure or storage or database, graphical user interface or GUI, audio or video or television or TV etc.

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 6,880,171 B1 (Ahmad et al.) 12 April 2005 (12.04.2005) (abstract, col. 4, ln 63 - col. 6, ln 40, col. 10 ln 32 - col. 12, ln 5, col. 14, ln 21 - col. 16, ln 15)	1-34
A	US 2005/0131727 A1 (Sezan et al.) 16 June 2005 (16.06.2005)	1-34

Further documents are listed in the continuation of Box C.

* 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
 "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)
 "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
 "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
 "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
 "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
22 May 2007 (22.05.2007)

Date of mailing of the international search report
24 SEP 2007

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:
Lee W. Young
PCT Helpdesk: 571-272-4300
PCT OSP: 571-272-7774