

(19) World Intellectual Property Organization
International Bureau



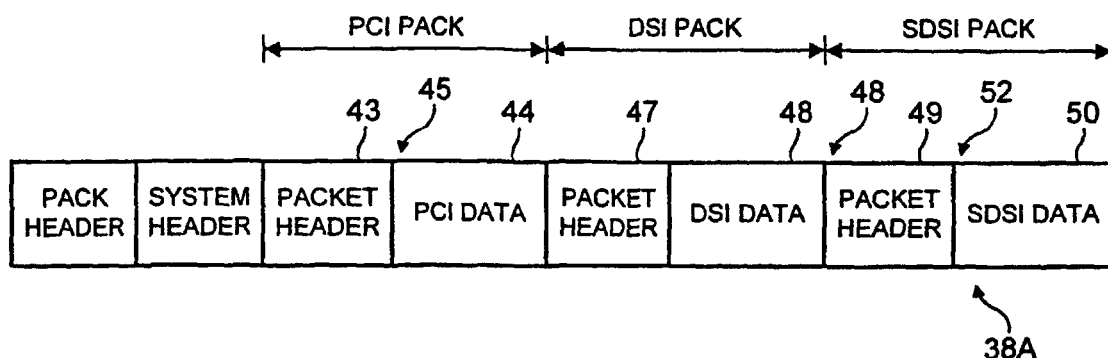
(43) International Publication Date
17 May 2001 (17.05.2001)

PCT

(10) International Publication Number
WO 01/35650 A1

- (51) International Patent Classification⁷: **H04N 5/783**
- (21) International Application Number: **PCT/US00/30413**
- (22) International Filing Date:
2 November 2000 (02.11.2000)
- (25) Filing Language: **English**
- (26) Publication Language: **English**
- (30) Priority Data:
60/164,791 10 November 1999 (10.11.1999) **US**
- (71) Applicant (for all designated States except US): **THOMSON LICENSING S.A.** [FR/FR]; 46, quai Alphonse Le Gallo, F-92648 Boulogne Cedex (FR).
- (72) Inventors; and
- (75) Inventors/Applicants (for US only): **WILLIS, Donald, Henry** [US/US]; 5175 East 74th Place, Indianapolis, IN 46250 (US). **SCHULTZ, Mark, Alan** [US/US]; 4437 Somerset Way S., Carmel, IN 46033 (US). **XIE, Jianlei, James** [CN/US]; 11852 Stoney Bay Circle, Carmel, IN 46033 (US).
- (74) Agents: **TRIPOLI, Joseph, S. et al.**; Thomson Multimedia Licensing Inc., P.O. Box 5312, Princeton, NJ 08540 (US).
- (81) Designated States (national): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW.
- (84) Designated States (regional): ARIPO patent (GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, 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.
- 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.

(54) Title: **IMPROVEMENTS TO DVD NAVIGATION INFORMATION FOR IMPROVED TRICK MODES**



(57) Abstract: A method for providing improved trick mode performance in a DVD having a plurality of video object units (VOBU) where each of the VOBUs contains a navigation pack. The method involves storing on the DVD within each navigation pack certain supplemental disc search information (SDSI). The SDSI can include one or more of the following: a picture structure of the VOBUs; a number of fields to be displayed from each picture in a normal play mode; and a number of groups of pictures (GOP) contained in said VOBUs.