

(19) World Intellectual Property Organization
International Bureau



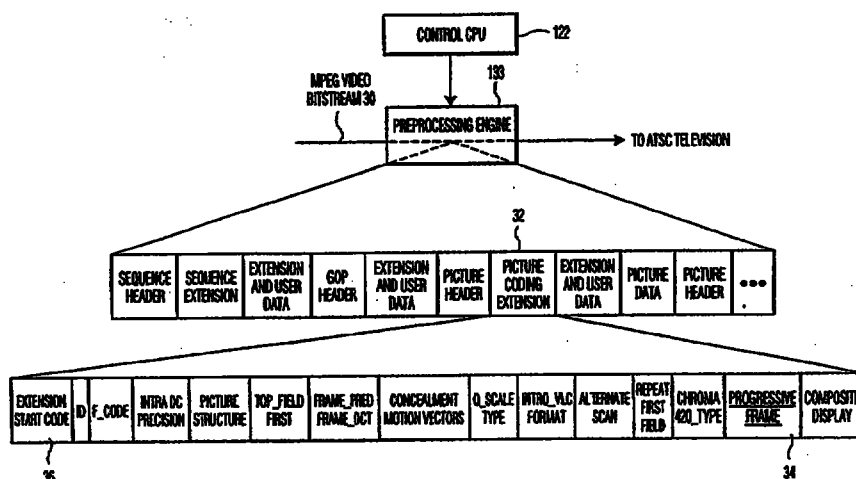
(43) International Publication Date
17 May 2001 (17.05.2001)

PCT

(10) International Publication Number
WO 01/35651 A1

- (51) International Patent Classification⁷: H04N 5/783 (74) Agents: TRIPOLI, Joseph, S. et al.; Thomson multimedia Licensing Inc., P.O. Box 5312, Princeton, NJ 08540 (US).
- (21) International Application Number: PCT/US00/30724
- (22) International Filing Date:
10 November 2000 (10.11.2000)
- (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). LIN, Shu [CN/US]; 9269 D Yale Drive, Indianapolis, IN 46240 (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.
- 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: ELIMINATING PICTURE FORMAT ARTIFACTS IN MPEG TRICK MODES



(57) Abstract: A method and apparatus for eliminating picture artifacts in a video media system is provided wherein a video recorder, responsive to a trick mode command, iteratively transmits one or more frames in a video signal recorded under an interlaced scanning format for display on a display device. The video signal can include a predetermined number of replicate frames associated with the frames. Moreover, structure can be provided for selectively altering the video signal to indicate the video signal was recorded under a progressive scanning format thereby causing one or more pairs of the interlaced fields associated with the frames in the recorded video signal to be simultaneously displayed on the display device. Displaying interlaced fields simultaneously during trick mode playback eliminates an artifact known as the vibration effect. In one embodiment, the structure can alter the video signal by setting the value of one or more flags (34) in the video signal. In addition, a decoder for decoding the video signal can be remotely located, for example, in the display device, or can be mounted in the video recorder.