



PCT

WORLD INTELLECTUAL PROPERTY ORGANIZATION
International Bureau

INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(51) International Patent Classification 6 : H04N 5/08, 7/167	A1	(11) International Publication Number: WO 97/41681 (43) International Publication Date: 6 November 1997 (06.11.97)
(21) International Application Number: PCT/IB97/00397 (22) International Filing Date: 14 April 1997 (14.04.97) (30) Priority Data: 96201141.7 26 April 1996 (26.04.96) EP (34) Countries for which the regional or international application was filed: NL et al. (71) Applicant: PHILIPS ELECTRONICS N.V. [NL/NL]; Groenewoudseweg 1, NL-5621 BA Eindhoven (NL). - pg 23 (71) Applicant (for SE only): PHILIPS NORDEN AB [SE/SE]; Kottbygatan 7, Kista, S-164 85 Stockholm (SE). (72) Inventors: LOOYKENS, Marinus, Adrianus, Henricus; Prof. Holstlaan 6, NL-5656 AA Eindhoven (NL). RUCKAERT, Albert, Maria, Arnold; Prof. Holstlaan 6, NL-5656 AA Eindhoven (NL). (74) Agent: VAN DER KRUK, Willem, Leonardus; Internationaal Octrooibureau B.V., P.O. Box 220, NL-5600 AE Eindhoven (NL).	(81) Designated States: BR, CN, JP, KR, SG VN, European patent (AT, BE, CH, DE, DK, ES, FI, FR , GB, GR, IE, IT, LU, MC, NL, PT, SE). Published With international search report. Before the expiration of the time limit for amending the claims and to be republished in the event of the receipt of amendments.	

(54) Title: MAGNETIC-TAPE RECORDING/REPRODUCING ARRANGEMENT COMPRISING A CODING DEVICE

(57) Abstract

A magnetic-tape recording/reproducing arrangement of the "helical scan" type adapted to record and/or reproduce a digitally coded video signal comprises a coding device (3). In the recording mode the coding device (3) performs channel-encoding upon a digital recording signal (C) so as to obtain a channel signal (D) for recording on the magnetic tape (7.1). In the reproduction mode the coding device (3) performs channel-decoding upon the channel signal (H) read from the magnetic tape (7.1), so that a digital reproduction signal is obtained which is a replica of the original recording signal (C). For this purpose, the coding device (3) comprises a data sequence generator (3.3) adapted to generate a data sequence (E) defined by the polynomial $P(X) = X^{15} + X^A + 1$, where $A = 7$ or 8 . Furthermore, the coding device (3) may comprise an XOR circuit (3.2) in which the signal (C, H) to be processed is combined with the generated data sequence (E), and selection means (3.1) to select the signal to be processed (C, H) from the recording signal (C) and the channel signal (H) in dependence upon the mode of operation of the recording/reproducing arrangement.

