

9803457-2



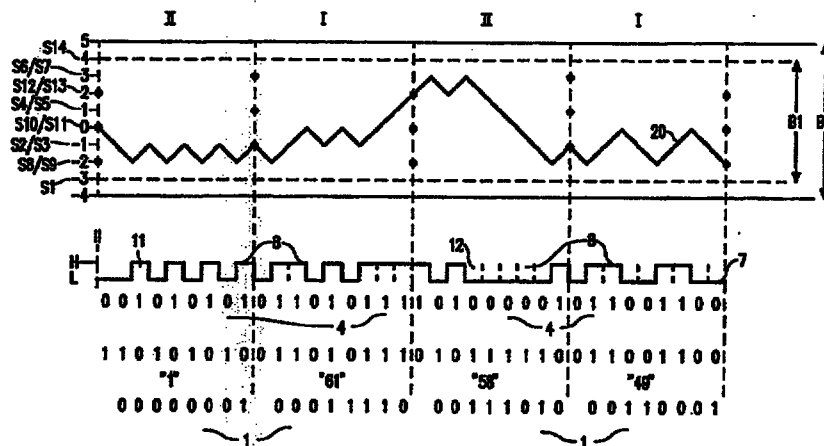
IPDS

PCTWORLD INTELLECTUAL PROPERTY ORGANIZATION
International Bureau

INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(51) International Patent Classification 6: H03M 7/20, G11B 20/10		A1	(11) International Publication Number: WO 98/18208
			(43) International Publication Date: 30 April 1998 (30.04.98)
(21) International Application Number: PCT/IB97/01106		(81) Designated States: BR, CN, HU, ID, JP, KR, NO, PL, SG, VN, European patent (AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE).	
(22) International Filing Date: 12 September 1997 (12.09.97)			
(30) Priority Data: 96202914.6 18 October 1996 (18.10.96) EP (34) Countries for which the regional or international application was filed: NL et al.		Published <i>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.</i>	
(71) Applicant: PHILIPS ELECTRONICS N.V. [NL/NL]; Groenewoudseweg 1, NL-5621 BA Eindhoven (NL).			
(71) Applicant (for SE only): PHILIPS NORDEN AB [SE/SE]; Kottbygatan 7, Kista, S-164 85 Stockholm (SE).			
(72) Inventor: ARTS, Petrus, Henricus, Marie; Prof. Holstlaan 6, NL-5656 AA Eindhoven (NL).			
(74) Agent: VAN DER KRUK, Willem, L.; Internationaal Octrooibureau B.V., P.O. Box 220, NL-5600 AE Eindhoven (NL).			

(54) Title: CONVERSION OF A SEQUENCE OF M-BIT INFORMATION WORDS INTO A MODULATED SIGNAL



(57) Abstract

The application relates to a method of converting a sequence of m-bit information words (1) to a modulated signal (7). For each received information word (1) from the sequence is delivered an n-bit code word (4). The delivered code words (4) form the modulated signal (7). When one of the code words (4) is assigned to the information word (1) to be converted, this code word is selected from a set of code words that depends on a coding state which is related to a digital sum value at the end of the part of the modulated signal that corresponds to the delivered code word (4). By at least one of the digital sum values a first (S2, S4, S6, S8, S10, S12) or a second (S3, S5, S7, S9, S11, S13) coding state of a pair of coding states of a first type is determined. Which of the two coding states of the pair is determined depends on the information word (1) that corresponds to the previously delivered code word (4). The sets (V2/V3; V4/V5; V6/V7; V8/V9; V10/V11; V12/V13) of code words belonging to the pairs of coding states of the first type contain no code word whatsoever in common. In this coding method the number of consecutive bit cells in the modulated signal having the same digital value does not exceed 7. Further, specific sync words are required for insertion between blocks of the codewords.