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INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(51) International Patent Classification 6 : H04L 25/03, H04B 1/707, H04L 12/28 — A1

(11) International Publication Number: **WO 97/37469**

(43) International Publication Date: 9 October 1997 (09.10.97)

(21) International Application Number: PCT/US97/04798

(22) International Filing Date: 25 March 1997 (25.03.97)

(30) Priority Data:
08/626,350 2 April 1996 (02.04.96) US

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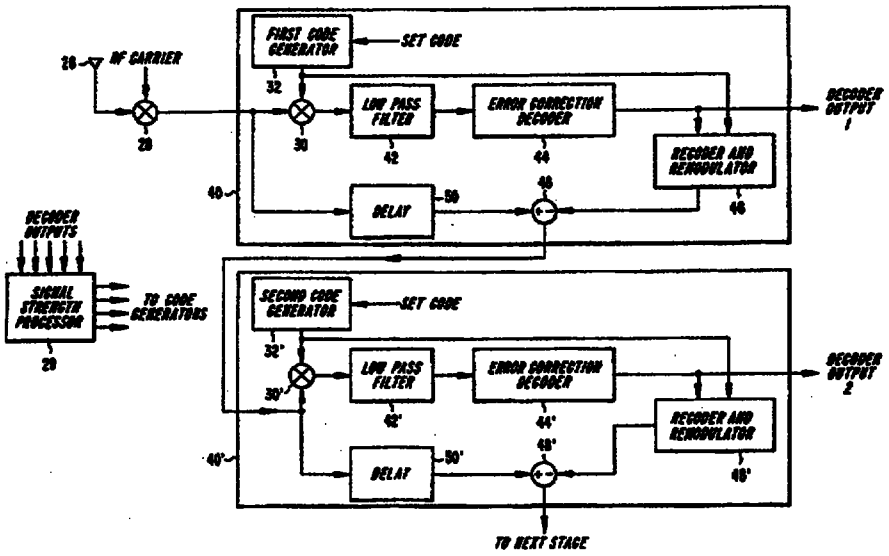
(81) Designated States: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, HU, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, TJ, TM, TR, TT, UA, UG, UZ, VN, ARIPO patent (GH, KE, LS, MW, SD, SZ, UG), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, 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 the receipt of amendments.

(54) Title: PACKET DATA TRANSMISSION WITH CLASH SUBTRACTION



(57) Abstract

A system for transmitting digital data messages between a plurality of stations using a common communications channel is disclosed. The data messages are assembled into data packets which include address and control information. The data packets are then transmitted from the stations over the common channel using appropriate data representative waveforms or modulation. A composite waveform representative of the data packets including potentially time overlapping data packets are received and processed to decode at least one packet. The waveform representative of the at least one decoded packet is reconstructed and subtracted form the received composite waveform to obtain a residual waveform. The residual waveform is then further processed to attempt to decode at least one further packet.