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(21) International Application Number: PCT/US96/17070 (22) International Filing Date: 11 October 1996 (11.10.96) (30) Priority Data: 60/005,444 12 October 1995 (12.10.95) US (71) Applicant: NEXT LEVEL COMMUNICATIONS [US/US]; 6153 State Farm Drive, Rohnert Park, CA 94928 (US). (72) Inventor: EBRINGER, Lawrence; 1717 Baker Street, San Francisco, CA 94115 (US). (74) Agents: ELDERING, Charles, A. et al.; 111 North Broad Street, Doylestown, PA 18901 (US).		(81) Designated States: AL, AM, AT, AU, AZ, BB, BG, BR, BY, CA, CH, CN, CZ, DE, DK, EE, ES, FI, GB, GE, HU, IS, JP, KE, KG, KP, KR, KZ, 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 (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 <i>With international search report.</i>
(54) Title: BURST MODE PREAMBLE 		
(57) Abstract In a burst mode communications system (figs. 1 and 2), bursts of information with a known preamble (402), fig. 4 are transmitted from a burst mode transmitter and are received by a burst mode receiver which uses the preamble to determine the presence of a burst and to determine the correct carrier frequency, carrier phase, symbol clock frequency and symbol clock phase in order to correctly recover the symbols transmitted, and thus the information contained within the burst. The present invention involves a method of burst transmission using a preamble (402) which contains an initial pulse (420) and a Barker sequence (440) following the initial pulse separated by a dead time (430) period equal to the transmission time of at least one symbol. The preamble can be transmitted on orthogonal carriers (fig. 5) and the order to the Barker sequence (440) can be reversed and multiplied by minus one on one of the carrier to reduce the probability that noise events on both carriers make the Barker sequence less detectable on each channel.		