

PCT

WORLD INTELLECTUAL PROPERTY ORGANIZATION
International Bureau



INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(51) International Patent Classification 6: H04B 7/26, 1/707		(11) International Publication Number: WO 96/35268
A1		(43) International Publication Date: 7 November 1996 (07.11.96)
(21) International Application Number: PCT/US96/07567		(81) Designated States: AL, AM, AT, AU, AZ, BB, BG, BR, BY, CA, CH, CN, CZ, DE, DK, EE, ES, FI, GE, GR, 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).
(22) International Filing Date: 2 May 1996 (02.05.96)		
(30) Priority Data: 436,029 5 May 1995 (05.05.95) US		
(71) Applicant: QUALCOMM INCORPORATED [US/US]; 6455 Lusk Boulevard, San Diego, CA 92121 (US).		
(72) Inventors: ZIV, Noam, A.; 10968 Corte Playa Barcelona, San Diego, CA 92124 (US). PADOVANI, Roberto; 13593 Penfield Point, San Diego, CA 92130 (US). LEVIN, Jeffrey, A.; 12549 Maestro Court, San Diego, CA 92130 (US). EASTON, Kenneth, D.; 7379 Calle Cristobal #217, San Diego, CA 92126 (US).		
(74) Agent: MILLER, Russell, B.; Qualcomm Incorporated, 6455 Lusk Boulevard, San Diego, CA 92121 (US).		

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: METHOD OF RECEIVING AND SEARCHING A SIGNAL TRANSMITTING IN BURSTS

(57) Abstract

An integrated search processor (128) used in a modem (110) for a spread spectrum communications system buffers in a buffer (172) received signals samples and utilizes a time sliced transform processor (120) operating on successive offsets from the buffer (172). The search processor (128) autonomously steps through a search as configured by a microprocessor (136) specified search parameter set, which can include the group of antennas to search over, the starting offset and width of the search window to search over, and the number of Walsh symbols to accumulate results at each offset. The search processor (128) calculates the correlation energy at each offset, and presents a summary report of the best paths found in the search to use for demodulation element (122) reassignment. The search is done in a linear fashion independent of the probability that a signal being searched for was transmitted at any given time.

