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(54) ADAPTIVE SIGNAL RECEIVER FOR COMA COMMUNICATION SYSTEM

(57) Abstract:

PROBLEM TO BE SOLVED: To minimize the harmful effect of multidimensional access interference(MAI) to bit error rate(BER) performance by automatically and periodically updating a compound adaptive part by respective blocks over one or plural symbols.

SOLUTION: A user signature sequence is composed of two components, namely, fixed term C_1 (anchor) and compound adaptive part x_1 (auxiliary code) to be updated by each symbol at least while using a recursive algorithm. A phase error signal $\Delta \phi$ from an output part 28 of a detector 26 is inputted to a phase rotator 29 for sampling channels P and Q. An in phase demodulated symbol bP (1) and a quadrature demodulated symbol bQ (2) are respectively sent out of outputs 210 and 220. Then, correlative processing uses the signature sequence composed of the fixed term (copy code) and adaptive part (auxiliary code) to be updated by each symbol at least. Namely, the compound adaptive part is automatically and periodically updated by

the respective blocks over one or plural symbols. COPYRIGHT: (C)1999,JPO

