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(54) Title: METHOD AND SYSTEM FOR PARALLEL DEMODULATION OF MULTIPLE CHIPS OF A CDMA SIGNAL

(57) Abstract

In a code division multiple access (CDMA) signal demodulator in a communication system (50), samples of a CDMA signal are stored in a sample buffer (52). A plurality of the samples that represent a plurality of chips of a symbol are then recalled from the sample buffer (52). Thereafter, the plurality of samples are demodulated in parallel (56) using a selected user code (68) to produce at least a portion of a user's symbol in the code division multiple access signal. Signals from multiple users (22, 24) having multiple fingers are demodulated by sharing the resources of a parallel demodulator (56). Signal searching may use the same parallel demodulator (56). Fingers for multiple users may be dynamically allocated and reallocated according to the needs of each user's signal and the total demodulation resources available.

