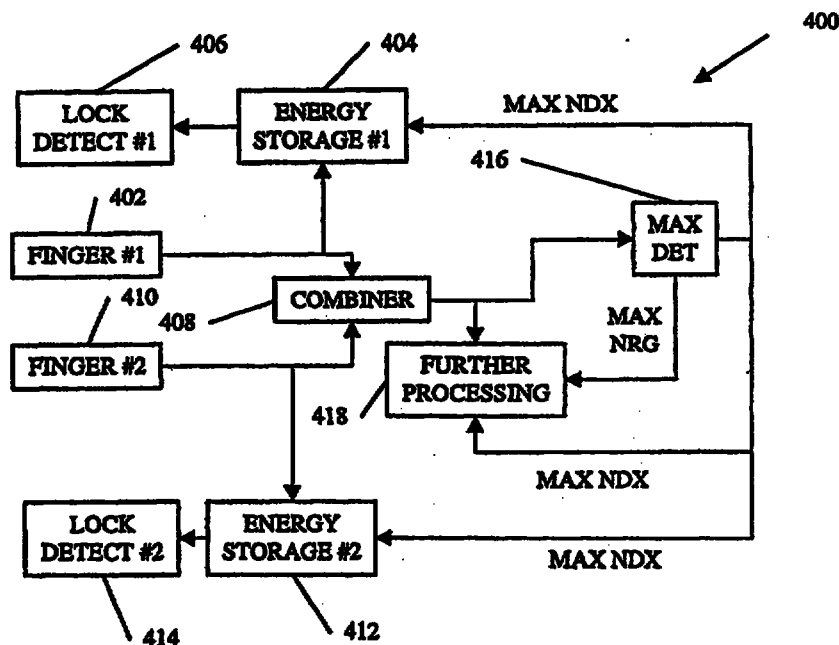




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(54) Title: LOCK DETECTION FOR MULTIPATH WIRELESS RECEIVER



(57) Abstract

A wireless receiver receiving multipath Walsh-code symbols determines which of fingers (402, 410) have locked on a signal. Measurements of the correlation energies between the received signal and all possible symbols are stored in energy storage units (404, 412). The actual signals are combined in combiner (408). A maximum determiner (416) determines the most likely combined symbol, and an index for this symbol is fed back to the energy storage units. Lock detectors (406, 414) use the measurement for this fed-back symbol to determine whether the finger has locked onto a path. This determination is used to decide whether the next signal detected by that finger should be applied to the combiner.