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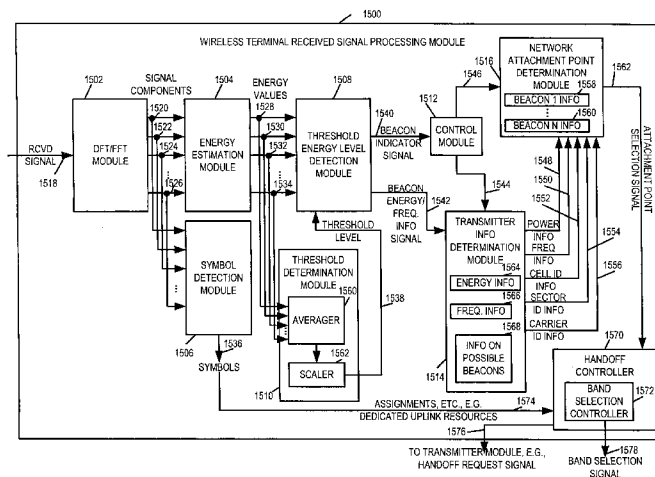
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(54) Title: METHODS AND APPARATUS FOR SELECTING BETWEEN MULTIPLE CARRIERS BASED ON SIGNAL ENERGY MEASUREMENTS



(57) Abstract: Carrier frequency selection and handoff initiation methods in wireless communications systems employing multiple carrier frequencies are described. Although the receiver is tuned to a single band, based on the relative energy of one or more beacon signal components corresponding to the currently used carrier and one or more beacon signal components corresponding to an alternative carrier, a carrier selection and a handoff determination is made. Mobile nodes can use a single RF chain with a controllable RF filter to receive and process a signal within a first selected carrier band including components from different transmitters, e.g., a first signal component identified with the first currently selected band and a second signal component identified with a second alternative band. The signal components, e.g., beacon signal components from different transmitters may be obtained from a signal which corresponds to multiple symbol transmission time periods. Separate signal energy measurements are performed on the first and second signal components. The signal component energy is compared, and a determination is made as to whether a handoff should be initiated.

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