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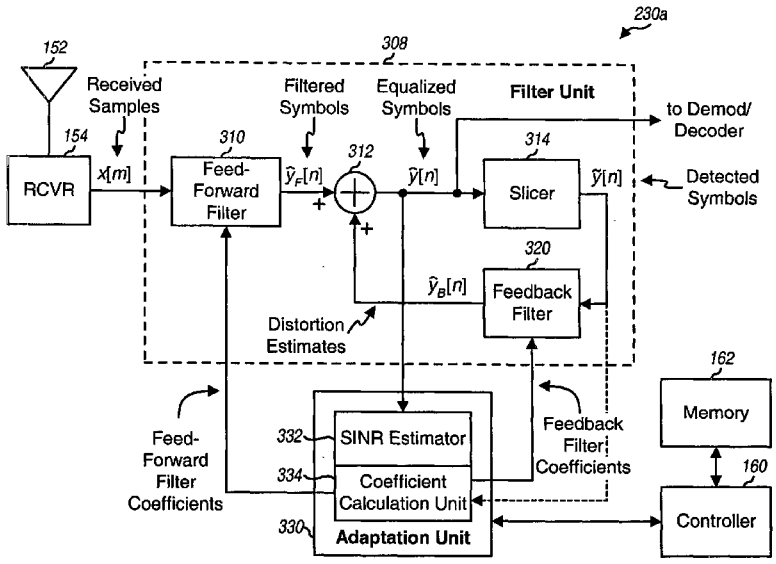
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(54) Title: RECEIVER WITH SELECTION BETWEEN A DECISION FEEDBACK EQUALIZER AND A LINEAR EQUALIZER



(57) Abstract: Techniques for selecting either a DFE or an LE for use to equalize a received signal, and for quickly and efficiently determining the coefficients for the selected equalizer. In an embodiment, a method is provided whereby the DFE is initially adapted based on the received signal and a particular adaptive algorithm (e.g., the LMS algorithm) for an initial time period. A quality metric is then determined for an output of the DFE. The DFE is selected for use if the quality metric is better than a threshold value, and the LE is selected otherwise. If the LE is selected, then the initial values for the coefficients of the LE may be derived based on the coefficients of a feed-forward filter and a feedback filter for the DFE, and the LE coefficients may further be adapted for an additional time period prior to its use to equalize the received signal.

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