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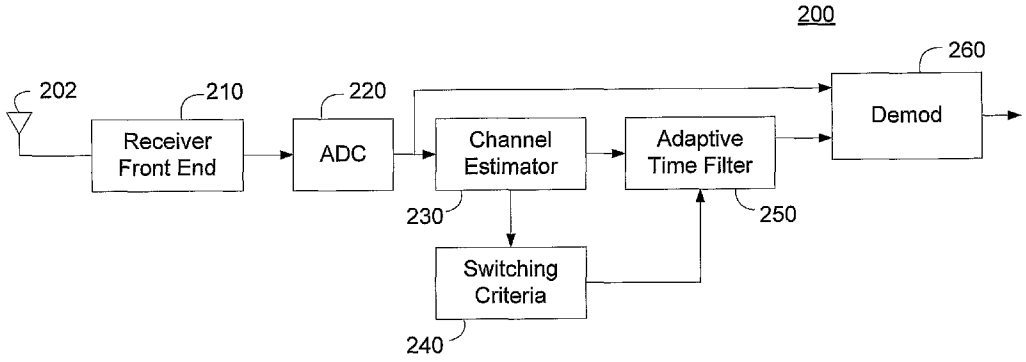
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(54) **Title:** ADAPTIVE TIME-FILTERING FOR CHANNEL ESTIMATION IN OFDM SYSTEM



(57) **Abstract:** Time filtering channel estimates in a wireless communication system, such as an Orthogonal Frequency Division Multiplex (OFDM) system, can be used to improve the quality of channel estimates. The characteristics of an optimal channel estimate time filter can depend on the manner in which the channel estimate is determined as well as the time correlation of channel estimates. A receiver can implement an adaptive time filter for channel estimates in which the time filter response can vary based on channel estimate parameters. The channel estimate parameters can include the manner of determining channel estimates, a time correlation of channel estimates, and an estimated Doppler frequency. The time filter response can be varied continuously over a range of responses or can be varied discretely over a predetermined number of time filter responses.

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