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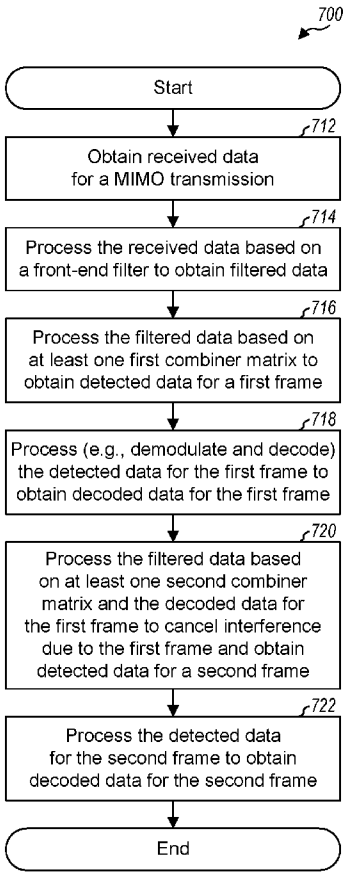
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(54) Title: MIMO DETECTION WITH INTERFERENCE CANCELLATION OP ON-TIME SIGNAL COMPONENTS



(57) Abstract: Techniques for receiving a MIMO transmission are described. A receiver processes received data for the MIMO transmission based on a front-end filter to obtain filtered data. The receiver further processes the filtered data based on at least one first combiner matrix to obtain detected data for a first frame. The receiver demodulates and decodes this detected data to obtain decoded data for the first frame. The receiver then processes the filtered data based on at least one second combiner matrix and the decoded data for the first frame to cancel interference due to the first frame and obtain detected data for a second frame. The receiver processes this detected data to obtain decoded data for the second frame. The front-end filter processes non on-time signal components in the received data. Each combiner matrix combines on-time signal components in the filtered data to obtain detected data for a channelization code.

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