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(54) **Title:** FREQUENCY MODULATION TRACKING FOR BAND REJECTION TO REDUCE DYNAMIC RANGE

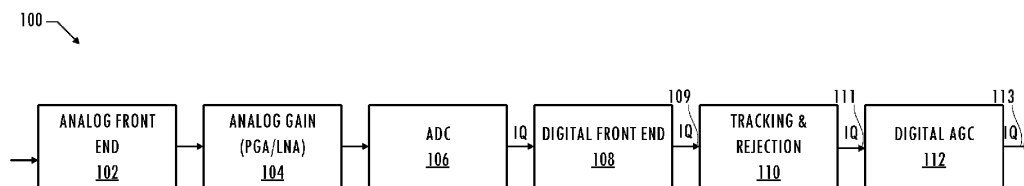


FIG. 1

(57) **Abstract:** A method for reducing a dynamic range of a received radio frequency signal includes receiving digital IQ signals corresponding to an in-phase component of the received radio frequency signal and a quadrature component of the received radio frequency signal. The method includes demodulating the digital IQ signals to generate an instantaneous frequency signal. The method includes selecting a center frequency of a selectable filter according to whether an interfering signal is detected in a target frequency band of the received radio frequency signal. The center frequency is selected from a predetermined frequency and an estimated center frequency determined using the instantaneous frequency signal. The method includes filtering the digital IQ signals using the selectable filter configured using the center frequency to generate output digital IQ signals.



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