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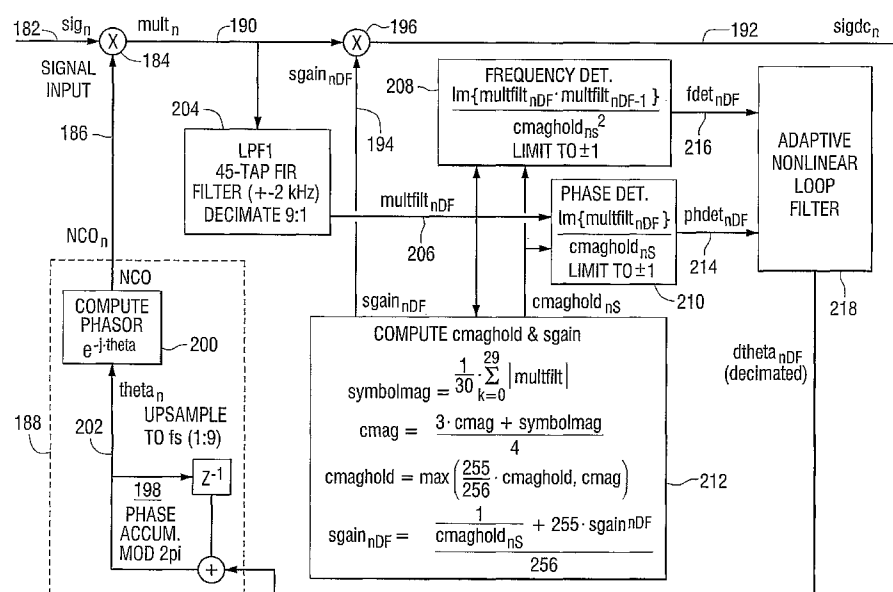
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(54) Title: CARRIER TRACKING FOR AM IN-BAND ON CHANNEL RADIO RECEIVERS



(57) Abstract: A method for carrier tracking in AM in-band on-channel radio receivers comprises the steps of receiving an input signal, generating a local oscillator signal in response to an oscillator control signal, mixing the input signal with a local oscillator signal to produce a first signal, filtering the first signal to produce a filtered first signal at a decimated sample rate, detecting the phase error and frequency error of the filtered first signal normalized to mitigate effects of signal fades, and using an adaptive loop filter to produce the oscillator control signal in response to the phase error and frequency error of the filtered first signal. An apparatus that performs the method is also provided.

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