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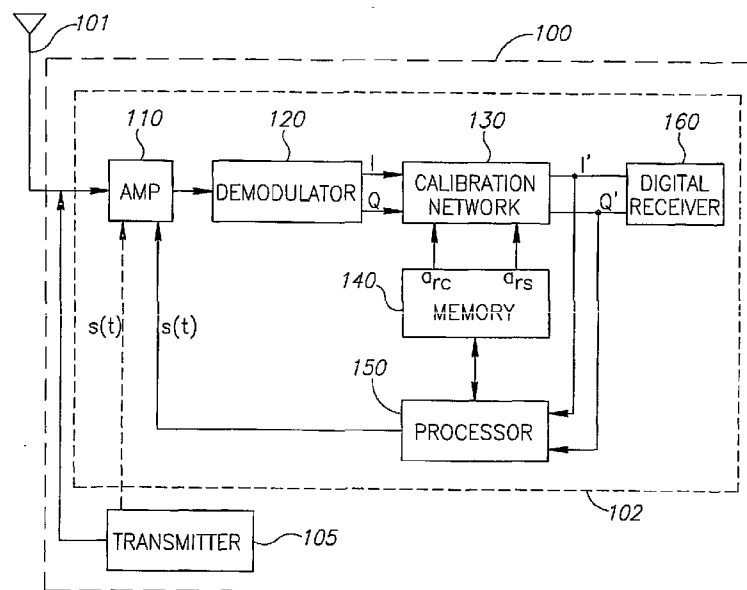
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(54) Title: METHOD AND APPARATUS TO COMPENSATE IMBALANCE OF DEMODULATOR



(57) Abstract: Briefly, a method and apparatus to compensate for an imbalance of a demodulator by providing calibration parameters to a calibration network is provided. The apparatus may include a calibration network that may output an in-phase signal and a quadrature signal and a processor to generate calibration parameters. The processor may generate the calibration parameters by measuring an average power of the in-phase signal, an average power of the quadrature signal; and a correlation between the in-phase signal to the quadrature signal.

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METHOD AND APPARATUS TO COMPENSATE IMBALANCE OF DEMODULATOR

BACKGROUND OF THE INVENTION

Demodulators may be used in receivers to demodulate an input signal that may
5 comprise data and voice to baseband signals, for example an in-phase (I) and a
quadrature (Q) signal. An example of a demodulator that provides IQ signals may be a
quadrature demodulator. The quadrature demodulator may receive a modulated radio
frequency (RF) signal and provide I and Q signals. However, various factors related to
the physical structure of the demodulator, such as for example, filters, local oscillator,
10 phase shifters and the like, may cause the demodulator to produce I and Q signals which
are imbalanced. An analog signal may be generated from a combination of the I and Q
signals and may include voice and/or data. The imbalance between the I and Q signals
may produce a distorted analog signal.

Thus, there is a need for better ways to provide balanced I and Q signals.

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