



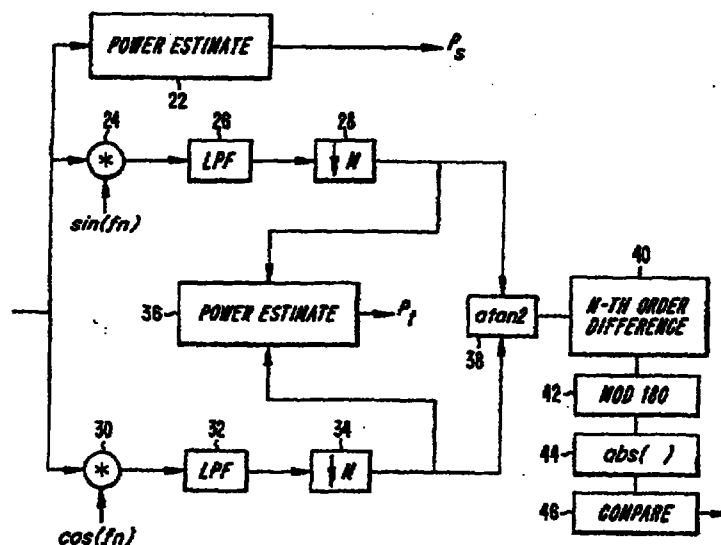
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(54) Title: **DISABLING TONE DETECTOR FOR NETWORK ECHO CANCELLER**



(57) Abstract

A method and apparatus for determining when an echo canceller should be disabled in a telephoning system is disclosed. First, a first power estimate is determined from an input signal. In addition, the input signal is divided into in-phase and quadrature components. The in-phase and quadrature components are then sub-sampled and used to determine a second power estimate. The first and second power estimates are compared to determine whether a predetermined tone is present. When the predetermined tone is detected, the present invention determines whether a phase reversal in the predetermined tone is present by using the in-phase and quadrature components. When the phase reversal is detected, the echo cancellers are disabled.