CLOSED-LOOP FREQUENCY CONTROL OF AN OSCILLATOR CIRCUIT

Abstract

The output frequency of a simple low-power-dissipation oscillator circuit (10) designed to drive PPS CMOS circuits (14) is controlled by a closed-loop system (24,26,28,34,36). In response to deviations of the output frequency from a prescribed value, the system generates correction signals that are applied to an array of capacitors (in 34). In that way, capacitance is electrically added to or subtracted from a series-resonant path (at 12) of the oscillator circuit, thereby to automatically establish and maintain the output frequency of the circuit at or near its prescribed value.

This Sheet Has Been Replaced

