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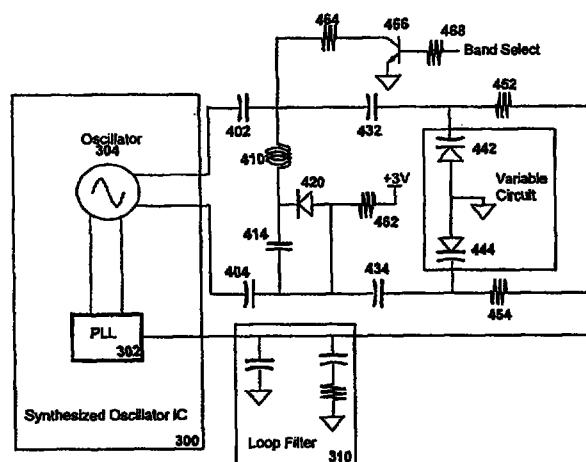
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(54) Title: METHOD AND APPARATUS FOR MULTIPLE BAND VOLTAGE CONTROLLED OSCILLATOR WITH NOISE IMMUNITY



(57) Abstract: An RF Voltage Controlled Oscillator (VCO) design having improved power supply noise immunity. More particularly, a VCO resonant circuit that provides a high circuit Q, immunity to noise, and is tunable over multiple distinct bands. The resonant circuit is implemented in conjunction with an integrated circuit oscillator that requires a tuned circuit to determine the frequency of operation. When the integrated circuit oscillator is used as a Local Oscillator (LO) within a wireless phone it is subjected to numerous sources of power supply noise. In a Code Division Multiple Access (CDMA) wireless phone system the power supply to portions of the RF transmit path are cycled on and off depending on the transmitted data rate. The present invention provides an oscillator with increased immunity to the noise induced on the power supply due to power supply cycling.

WO 01/10025 A1