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(54) FREQUENCY SELECTIVE ATTENUATOR FOR OPTIMIZED RADIO FREQUENCY COEXISTENCE

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ABSTRACT (57)

A wireless transceiver including a receiver circuit coupled to an RF transceiver node, a tunable notch filter coupled between the RF transceiver node and a reference node, and a controller that programs the tunable notch filter with a selected blocker frequency and that selectively enables the tunable notch filter to attenuate at least one blocker signal. The tunable notch filter may include a variable capacitor and an inductor coupled in series between the RF transceiver node and ground. The inductor of the tunable notch filter may include a bondwire coupled between a semiconductor die and a semiconductor package. The inductance may include a physical inductor mounted on the package or a printed circuit board. The tunable notch filter may be enabled by a switch selectively coupling the filter to either the RF transceiver node or ground. The variable capacitor may be digitally programmed with digital values stored in a memory.



