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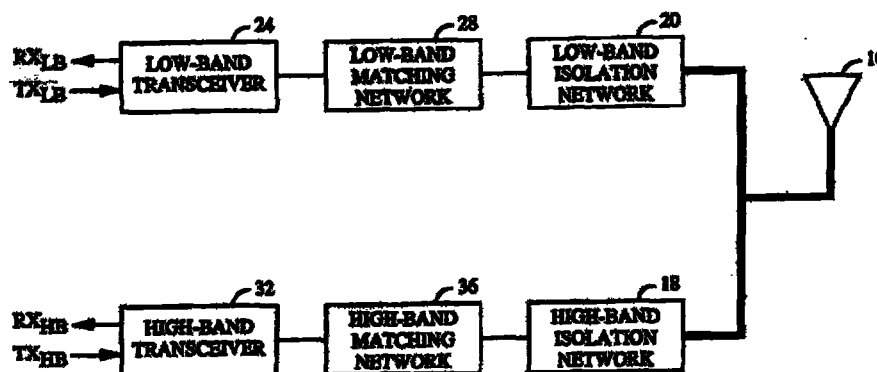
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(54) Title: DUAL-BAND ANTENNA SYSTEM



(57) Abstract

A dual-band antenna system for use in a portable communications device is disclosed herein. The antenna system includes an antenna element (10) for radiating electromagnetic energy within low-band and high-band wavelength ranges. In a preferred embodiment, a low-band isolator network (20), coupled to the antenna element (10), provides signal isolation between high-band and low-band signal paths during high-band operation. Similarly, a high-band isolator network (18) provides signal isolation, during operation over the low-band range of wavelengths, between the high-band and low-band signal paths. During transmit and receive operation, low-band and high-band electromagnetic energy directed through the antenna (10) is passed by the low-band and high-band isolator networks, (20) and (18) respectively. Also included are low-band and high-band matching networks (28) and (36), respectively, which couple the low-band and high-band isolator networks (20) and (18), respectively, to low-band and high-band transceiver circuitry.