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(54) **POWER AMPLIFIER CIRCUIT**

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(57) **ABSTRACT**

A power amplifier circuit includes a first amplifier, a second amplifier, a third amplifier, and a harmonic suppression circuit. The first amplifier operates on power supplied through a first supply line, and amplifies a first transmit signal in a first frequency band. The second amplifier operates on power supplied through a second supply line connected to the first supply line, and amplifies a second transmit signal in a second frequency band different from the first frequency band. The third amplifier shares an antenna with the second amplifier, and amplifies a receive signal in the second frequency band received from the antenna. The harmonic suppression circuit generates, based on a harmonic of the first transmit signal, a suppression signal to suppress the harmonic to be transferred to the first supply line, and outputs the suppression signal to the first supply line or the second supply line.