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### (54) CROSS TALK AND INTERFERENCE MITIGATION IN DUAL WIRELESS POWER TRANSMITTER

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#### (57)ABSTRACT

A dual wireless power transfer system includes an input power supply and a first wireless power transmission system receiving power at a first power input from the input power supply. The first wireless power transmission system includes a first transmitter antenna and a first driver for driving the first transmitter antenna for wireless power transmission and wireless receipt of data, wherein data wirelessly received at the first transmitter antenna at least partially feeds back onto the first power input. A second wireless power transmission system includes a second transmitter antenna and a second driver for driving the second transmitter antenna for wireless power transmission. A low voltage drop out receives power from the input power supply and provides power at a preselected lower voltage to the second wireless power transmission system, such that V<sub>2</sub> is independent of data received at the first transmitter antenna.

