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(54) **POWER CAPABILITY DETECTION FOR WIRELESS POWER TRANSMISSION BASED ON RECEIVER POWER REQUEST**

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(57) **ABSTRACT**

A power transmitter for wireless power transfer includes a control and communications unit, an inverter circuit, a coil, and a shielding. The control and communications unit is configured to provide power control signals to control a power level of a power signal configured for transmission to a power receiver, receive a receiver power request from a power receiver, provide a power request to an external power supply, based on the receiver power request, determine if a power signal at the coil is compliant with the receiver power request, and, if the power signal at the coil is compliant with the receiver power request, continue to operate for wireless power transmission. The coil is configured to transmit the power signal to a power receiver. The shielding comprises a ferrite core.