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ABSTRACT

A method includes: wirelessly receiving power with a receiver resonant tank from a transmitting coil; rectifying a receiver voltage by switching first and second legs of a synchronous rectifier based on a zero-crossing of a receiver current flowing through the receiver resonant tank to produce a rectified voltage; and while wirelessly receiving power with the receiver resonant tank, encoding data by causing transitions in a transmitter current flowing through the transmitting coil using the synchronous rectifier, where encoding the data includes: applying a first sudden delay period in a first direction to a first switching of the first and second legs to cause a transition in the transmitter current; and applying a first gradual delay in the first direction to subsequent switching of the first and second legs, where the first gradual delay is gradually incremented by an increment period that is smaller than the first sudden delay period.

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