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(54) **DYNAMIC INFERRED COUPLING
ESTIMATION**

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ABSTRACT

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Systems, methods and apparatus for providing a wireless charging device are disclosed. A method for operating the wireless charging device includes transmitting a first pulse through each of a plurality of charging circuits, determining peak voltage at nodes in the plurality of charging circuits, each node coupling a transmitting coil to a capacitor in one charging circuit in the plurality of charging circuits, the peak voltage at each node being responsive to the first pulse and indicative of a coupling coefficient with a receiving coil in a chargeable device, determining that a minimum peak voltage responsive to the first pulse is associated with a first charging circuit in the plurality of charging circuits, and providing a first charging current to the first charging circuit.

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