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(54) **ACTIVE COOLING IN A MULTI-DEVICE WIRELESS CHARGER**

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(57) **ABSTRACT**

Systems, methods and apparatus for wireless charging are disclosed. A wireless charging device has a plurality of planar power transmitting coils, a driver circuit and at least one substrate having channels formed therein. The channels can receive a flow of air at a port of entry and conduct the flow of air through the substrate to a port of exit. The planar power transmitting coils may be supported by at least one substrate. Each planar power transmitting coil may be formed as a spiral winding surrounding a power transfer area. The driver circuit may be configured to provide a charging current to one or more of the planar power transmitting coils when a chargeable device is placed on or near the wireless charging device. The one or more channels may be configured to conduct the flow of air past or through the planar power transmitting coils and the driver circuit.