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(54) MAGNETIC RESONANCE WIRELESS CHARGING SYSTEM FOR A VEHICLE

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(57)**ABSTRACT**

A wireless charging system may comprise a center console affixed in a vehicle. A layer assembly is attached to the center console. The layer assembly comprises a printed circuit board (PCB) that contains at least one amplifier, at least one filter, and at least one transmitting antenna. A power source is connected to the PCB and is activated at vehicle start or with the activation of a switch. The at least one transmitting antenna is oriented within 0 mm to 25.4 mm from an outer surface of the center console. The transmitting antenna produces a charging zone that emits power within an area that has a shape approximately equaling a cone and provides up to 25 watts of power to a mobile device that comprises a receiving antenna. The mobile device may be a cell phone, a wearable, a dongle, a wireless earbud, or a tablet.

