

TITLE:

POWER MANAGEMENT CIRCUIT FOR ELECTRIC AUXILIARY VEHICLE

ABSTRACT

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Disclosed is a power management circuit (100) for an electric auxiliary vehicle (10) including a battery (BT), a motor (MT), and a power receiving terminal (TC). The power management circuit includes a transformer (TR), a primary circuit (110), first (120) and second power transmission circuits (130), and a controller (140). The transformer includes
10 primary (LP) and secondary windings (LS). The primary circuit (110) is connected to primary winding and power receiving terminal. The first power transmission circuit is connected to secondary winding and battery. The second power transmission circuit is connected to secondary winding, battery, and motor. The controller controls primary circuit and first power transmission circuit to provide battery power (PB) of battery to power
15 receiving terminal in a first operating mode. The controller controls second power transmission circuit in a second operating mode, so that second power transmission circuit uses power of motor (PM) to charge the battery.

20 FIG. 1