

ABSTRACT

BATTERY-DRIVEN MOTOR AND MOTOR-DRIVEN SYSTEM

To provide a battery-driven motor and a motor-driven system that achieve high output density without compromising overall system efficiency, a battery-driven motor is supplied electric power from a battery via an inverter
5 to drive a load, wherein current supplied from the battery is 3.0 C or more when driven at maximum output, the battery-driven motor including a stator core (12) provided with an electrical steel sheet as an iron core material that has a magnetic flux density of 1.65 T or more at a magnetic field strength of 5,000 A/m and an iron loss of 40.0 W/kg or less under sinusoidal excitation of
10 1 kHz - 1.0 T.

(FIG. 4)