

**TITLE OF INVENTION: ROTATING ELECTRICAL MACHINE AND
OPERATING METHOD THEREOF**

ABSTRACT

A rotating electrical machine comprises a frame, a rotating device, a first stator, a second stator, and a flywheel. The rotating device, along with the first and second stators, is accommodated inside the frame. The rotating device consists of a rotor and a shaft fixed at the center of the rotor. The rotor rotates by electromagnetically interacting with the first and second stators. The shaft rotates simultaneously with the rotor. The flywheel is coupled to the shaft and is driven by it. Thus, the rotating electrical machine can operate in either energy storage or energy release mode. And an operating method for the rotating electrical machine.

[FIG. 2]