



Title
THERMAL MANAGEMENT PASSIVE DEVICE FOR A BATTERY THAT EQUIPS AN ELECTRIC VEHICLE

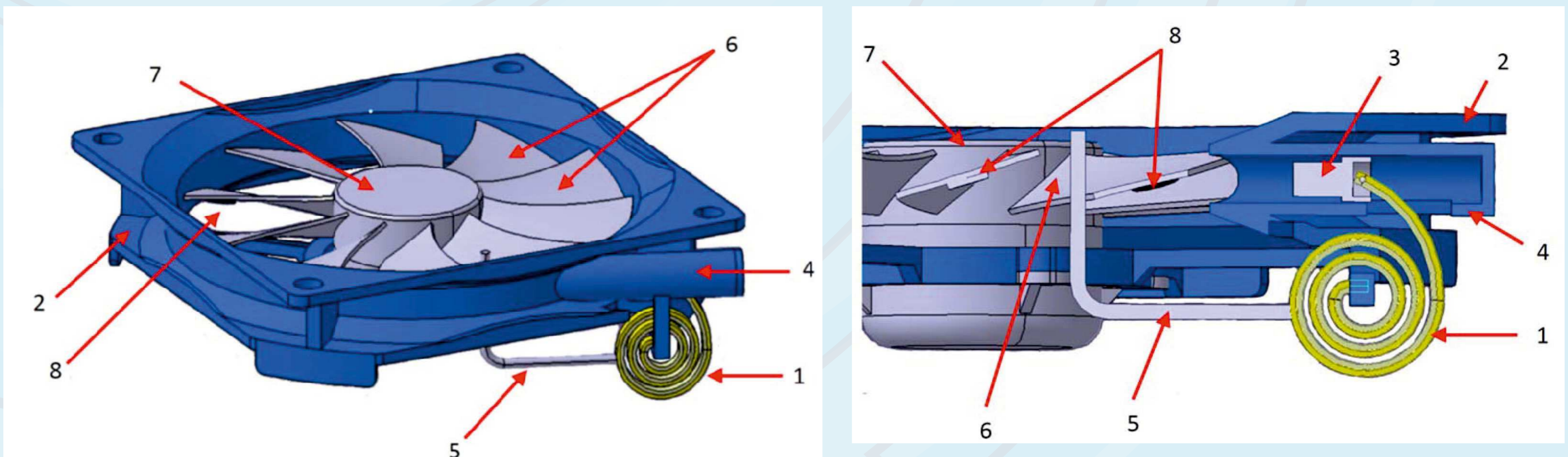
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PATENT APPLICATION OSIM: A/00448/2019

Short presentation
The problem of achieving a proper thermal management of a battery that equips an electric vehicle, is given by the process of thermal demand (heating) of the electrochemical cells that form the battery, during the operation of the electric propulsion group of the electric vehicle. Battery thermal stress is directly related to the required electric power required by the powertrain to achieve dynamic parameters (speed, acceleration, torque to the wheels, etc.) required by operating conditions. The invention relates to a passive device for performing the thermal management of a battery that equips an electric vehicle, by automatically maintaining the temperature (within predetermined limits) inside the housing of a battery that equips an electric vehicle using the interaction between two opposite magnetic fields.

Applicability
Different energy sources, batteries, electric of hybrid vehicles, thermal management systems and/or devices

Images



1-bimetalllic spring; 2-ventilator case; 3-primary magnet; 4-guidance;
5-mobile arm; 6-blade; 7-rotor; 8-secondary magnet.