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(54) Title: INTEGRATED MOTOR CONTROLLER FOR ELECTRIC TWO WHEELER

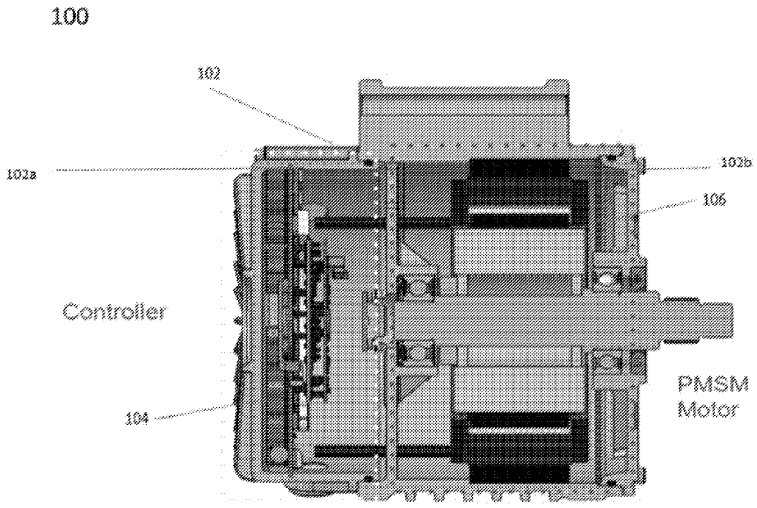


Figure. 1

(57) Abstract: The present invention relates to an integrated electric system for an electric vehicle The system comprises a physical enclosure partitioned into a first section and a second section. A motor controller is housed within the first section and includes multiple functional modules configured to control the operation of a motor housed in the second section. The motor controller comprises a power electronics module for regulating power supply to the motor, a control electronics module for executing control algorithms, and a sensing electronics module for monitoring motor parameters such as speed, position, and temperature. These modules are arranged in a vertically stacked three-dimensional configuration, enabling compact design, efficient thermal management, and precise motor control.

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