(19) INDIA

(22) Date of filing of Application :11/09/2023 (43) Publication Date : 06/10/2023

## (54) Title of the invention: A MULTI-FUNCTIONAL REMOVABLE BATTERY ENCLOSURE FOR ELECTRIC VEHICLES

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(57) A1		inou rujp oru

## (57) Abstract:

ABSTRACT A MULTI-FUNCTIONAL REMOVABLE BATTERY ENCLOSURE FOR ELECTRIC VEHICLES A multi-functional removable battery enclosure for electric vehicles is provided. The multi-functional removable battery enclosure comprises a removable battery enclosure (1) for securely holding the removable battery, a liquid cooling system (2) for efficiently dissipating heat during battery operation, a tamper proof mechanism (3) for providing secure locks, sensors and authentication mechanisms to prevent unauthorized access, theft or tampering with the battery, an e-sim integrated board (4) is integrated into the battery enclosure and facilitates communication with one or more mobile and computer devices through cellular networks enabling real time GPS tracking and data transmission, a temperature and hazard alerts system (7) for monitoring battery's temperature in real-time, and a battery-health display (8) for displaying battery's current charge percentage. [Figure 1]

No. of Pages: 24 No. of Claims: 10