

BOLLINGER MOTORS

Bollinger Motors Files Patent for Streamlined Battery Pack Design *Robust I-Beam Framework Enables Integral Space-Saving & Battery Cooling*

DETROIT, Oct. 15, 2020 — Bollinger Motors has filed a patent with the United States Patent and Trademark Office (USPTO) for its battery pack design. The scope of the patent includes mechanical, electrical, and systems-engineering innovations.

"The heart of every EV is the battery, so it was crucial for us to develop our own battery pack in-house." says CEO Robert Bollinger. "Our engineering team has created a pack with high-strength structural properties, exemplary cooling features, and state-of-the-art software."

The Bollinger Motors battery pack is composed of modules in 35 kWh strings that can be connected in series or parallel to form a variety of pack sizes and configurations. Pack sizes will include 35, 70, 105, 140, 175 kWh, and higher, with many sizes capable of both 350V and 700V configurations.

The modules are connected to both sides of a symmetrical and structural I-beam. The I-beam includes channels, through which cooling fluid is pumped, to extract heat away from the battery modules. The I-beams also provide cross-vehicle structural support and help protect the pack from side intrusions.

The Battery Management System (BMS) has also been developed in-house. The BMS has been created to handle any number of strings, therefore one BMS can be manufactured for all future battery-pack sizes and voltages. The BMS monitors voltage, current, and temperature at multiple points within the pack and manages the system accordingly. It works with other vehicle-control units to maintain optimum operating conditions that increase efficiency and extend battery life. The BMS also provides several features which ensure system safety, including detecting and isolating faults to enable continued vehicle operation.

Designed for safety, high energy density, and high continuous power capacity, the Bollinger Motors battery pack will be suitable for heavier applications such as medium duty trucks, agricultural, and construction equipment.

Bollinger Motors will manufacture battery packs for its own vehicles – as well as make them commercially available for standalone applications – starting in 2021.

Bollinger Motors filed the provisional patent application on October 12, 2020. The patent application number is 17/068,260.

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About Bollinger Motors

Founded in 2015 by Robert Bollinger, Bollinger Motors is a US-based company, headquartered outside of Detroit, Michigan. Bollinger Motors will manufacture the world's first all-electric, on- and off-road trucks, the B1 Sport Utility Truck (SUT) and the B2 Pickup Truck, as well as the B2 Chassis-Cab – the world's first and only Class 3 all-electric chassis-cab truck platform. The two-door B1, unveiled in 2017, is displayed at The Peterson Museum in Los Angeles, as part of the 'Alternating Currents' exhibit. Bollinger Motors will also manufacture the Chass-E™, a fully customizable platform available for commercial use in 2021. Bollinger Motors unveiled its DELIVER-E™ all-electric delivery van concept in August of 2020. The B1, B2, and B2 Chassis-Cab trucks may be reserved with a \$1,000 deposit at www.BollingerMotors.com.