PowerPanels: Sandwich Panels with Battery Cores

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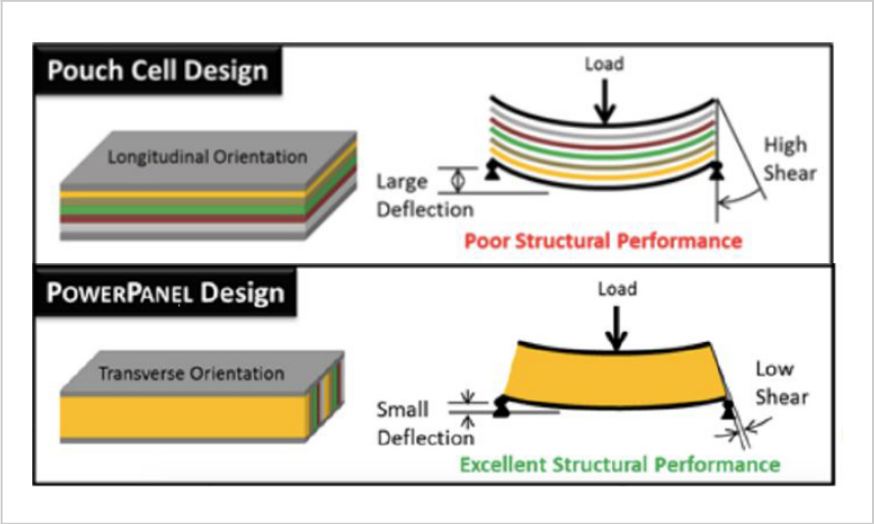

Traditional battery (top) vs PowerPanel

Technology Summary

PowerPanel are a novel design of battery that can fit into the frame of a device instead of requiring a separate battery housing. The load bearing capabilities of this new design is due to the orientation of the battery core components. In traditional batteries, the battery core components made up of anodes, separators, and cathodes are orientated horizontally. The PowerPanel technology oriented those same battery core elements in vertically.

Application & Market Utility

This technology can be implemented into any system or device that requires portable energy like cars, drones, segways, and bikes. The PowerPanel allows vehicles to decrease total weight by having the battery acting as the frame as opposed to a separate battery compartment. This weight reduction saves companies money through less production needed in the materials and by decreasing the energy used per unit.

Next Steps

Test the financial and engineering feasability of this technology is various models and sizes of vehicle. Patent 10,439,248 has issued.

TECHNOLOGY READINESS LEVEL 4-7

Seeking

Investment | Licensing |

Keywords

- structural battery
- structure-battery composite
- energy storage
- multifunctional composites
- battery core components

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