

Categories

Electronics, Devices, and System, Energy and Environment

Solution

Current Fuel Cell Electric Vehicles (FCEV) utilize hydrogen stored and refilled in the form of compressed gas, requiring heavy infrastructure and compressed tanks. Through this technology paired with H2SS, Hydrogen is generated on-the-go through the use of solid-state hydrogen with water, providing a cleaner energy alternative with less carbon footprint.

Technology & Applications

The Hydrogen Paired Electric Race car (HyPER) is a hybrid electric vehicle integrated with batteries, graphene based ultracapacitors and hydrogen fuel cells also known as the Hydrogen Hybrid Energy Storage System (H2SS).

Paired with a hydrolysis based in-situ hydrogen production system, applications within the spectrum of mobility ranges from micro 2-wheelers up to heavy commercial vehicles within the mobility space.

Advantages

Within a H2SS based vehicle:

- PEM Fuel Cell acts as a range extender, able to slow charge batteries while the vehicle is in use.
- Large reduction in carbon footprint.
- Extended EV battery life through the use of Graphene Ultracapacitors

Intellectual Properties

Patent: PI2021005187

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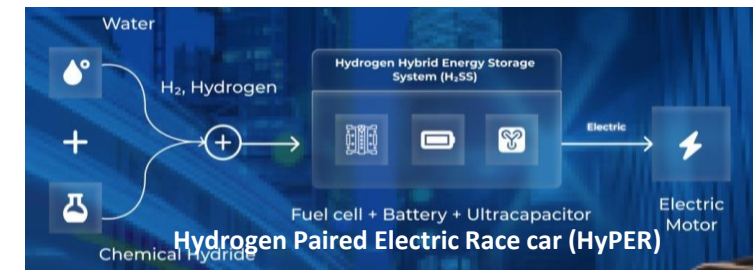
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Technology Partners

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