

What is high performance battery (HPB)?

Bonn (ots) The Bonn-based company High Performance Battery (HPB) has achieved a decisive breakthrough in battery and storage technology: a team led by Prof. Dr. Günther Hambitzer has developed the world's first solid-state battery with outstanding properties to production readiness.

Is HPB solid state electrolyte safe?

By using the HPB solid state electrolyte developed by us, the performance of our battery will remain almost constant over its lifetime. No matter how heavy the battery is used. Our battery technology is safe because our HPB solid state electrolyte is non-flammable and the battery is non-explosive.

What is HPB solid-state battery & HPB electrolyte?

Overall, HPB solid-state batteries and HPB solid-state electrolyte make an important contribution to the energy and mobility transition and to reducing dependence on raw materials. While the annual demand for storage was still 180 gigawatt-hours in 2018, it is expected to exceed 2,000 gigawatt-hours by 2030.

Are HPB batteries safe?

Our battery technology is safe because our HPB solid state electrolyte is non-flammable and the battery is non-explosive. No critical raw materials are needed for production. This also improves the environmental balance by more than half compared to conventional lithium-ion batteries.

Why should you choose HPB solid-state battery?

As a new basic technology, our HPB solid-state battery makes an important contribution to this. The combination of its properties is a "game changer" and a success factor for the success of the energy transition. The characteristics of our HPB solid-state electrolyte have already been confirmed by independent research institutes.

What makes HPB a good battery?

For the automotive industry, which develops its own high-performance rechargeable batteries, HPB provides its safe, robust and outstandingly conductive HPB solid-state electrolyte. In this way, the HPB solid-state electrolyte ensures that sufficient power is available even at extreme temperatures.

MOZAMBIQUE HPB SOLID STATE BATTERY



Overall, HPB solid-state batteries and HPB solid-state electrolyte make an important contribution to the energy and mobility transition and to reducing dependence on raw materials. While the annual demand for storage was still 180 gigawatt-hours in 2018, it is expected to exceed 2,000 gigawatt-hours by 2030.



(Bonn, Germany) The Bonn-based company High Performance Battery (HPB) has achieved a decisive breakthrough in battery and storage technology: a team led by Prof. Dr. G nter Hambitzer has developed the world's first solid-state battery with outstanding properties to production readiness.



TEUFEN, Switzerland, May 31, 2021 /PRNewswire/ -- An important milestone has been reached: The company High Performance Battery (HPB) has developed the world's first solid-state battery whose core

MOZAMBIQUE HPB SOLID STATE BATTERY



A team of scientists working for Bonn-based company High Performance Battery (HPB), led by Prof. Dr. G nther Hambitzer, has achieved a decisive breakthrough in battery and storage technology with the development ???



HPB Solid-State Battery Engineered to store renewable energy in a safer and more sustainable way. High Performance Battery Technology GmbH (HPBT) has developed an advanced solid-state battery that offers safety, a tremendous battery lifetime and up to a 50 % better environmental balance.



The subject of battery development is the interaction of the three core components of a battery: anode, cathode and the HPB Solid-State Electrolyte as a complete battery cell. The development also includes industrial production up to the battery module (several battery cells combined form a battery module).

MOZAMBIQUE HPB SOLID STATE BATTERY



Solid-state battery with 50% better environmental balance on short way to production, High Performance Battery. An important milestone has been reached: The company High Performance Battery (HPB) has developed the world's first solid-state battery whose core ??? unlike all other solid-state battery projects ??? is the result of a chemical reaction within the battery.



The Bonn-based company High Performance Battery (HPB) has achieved a decisive breakthrough in battery and storage technology: a team led by Prof. Dr. G?nther Hambitzer has developed the world's first solid-state battery with outstanding properties to production readiness.



High Performance Battery Technology GmbH (HPBT) has developed an advanced solid-state battery that offers safety, a tremendous battery lifetime and up to a 50 % better environmental balance. The solid electrolyte ??? based on an inorganic system ??? is introduced into the cell in a liquid state using a drop-in process.

MOZAMBIQUE HPB SOLID STATE BATTERY



The HPB Solid-State Electrolyte is formed from solid and liquid starting materials directly in the cell. Thanks to the unique drop-in production, the manufacturing of the HPB Solid-State Battery can be scaled up without the need to develop completely new production technologies.



(Bonn, Germany) The Bonn-based company High Performance Battery (HPB) has achieved a decisive breakthrough in battery and storage technology: a team led by Prof. Dr. G nther Hambitzer has developed ???



(Bonn, Germany) The Bonn-based company High Performance Battery (HPB) has achieved a decisive breakthrough in battery and storage technology: a team led by Prof. Dr. G nther Hambitzer has developed the world's first solid-state battery with outstanding properties to production readiness. The applications range from stationary storage for home and ???

MOZAMBIQUE HPB SOLID STATE BATTERY



HPB plans to start production of its solid state battery in Switzerland. /HPB German battery start-up High-Performance Battery (HPB) claims to have reached a breakthrough in battery technology by lifting its solid-stat. This content has been archived.



The Bonn-based company High Performance Battery (HPB) has achieved a decisive breakthrough in battery and storage technology: a team led by Prof. Dr. G nter Hambitzer has developed the world's first solid-state battery with outstanding properties to production readiness. The applications range from stationary storage for home and industrial ???



The list of positive features of the HPB solid-state battery is long: The innovative battery technology of the High Performance Battery has an extremely long service life without loss of performance at almost constant capacity. Furthermore, the solid state battery is resistant to deep discharge and fast charging, the solid ion conductor is non

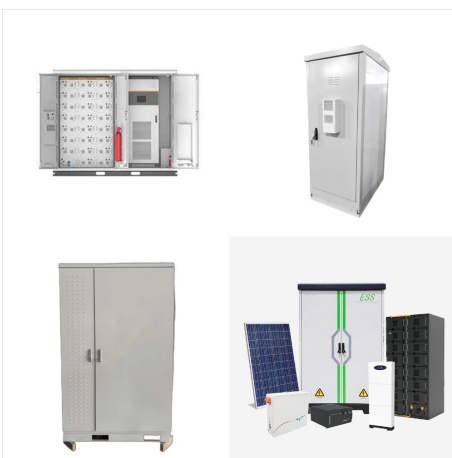
MOZAMBIQUE HPB SOLID STATE BATTERY



Bonn, Germany-based High Performance Battery (HPB), a startup specializing in the research and development of high-tech batteries, has developed what it reports to be the world's first solid-state battery ready for series production.



While conventional lithium-ion batteries have to be replaced after about 1,250 charging cycles ??? with hourly charging and discharging ??? the HPB solid-state battery currently has at least 12,500 charging cycles with a comparable load, said HPB.



With the cylib process HPB expects to enhance the given easy recyclability of the HPB Solid-State Battery by innovative and climate-friendly recycling procedures all the way down to pyro- and hydrometallurgical extraction of raw materials. This allows for an even more sustainable transfer of waste from end-of-life batteries or production scrap

MOZAMBIQUE HPB SOLID STATE BATTERY



2 Fraunhofer ISI (2022): Solid State Battery Roadmap 2035+. Diese Kapazität kann vollst?ndig, d. h. von 0-100 % State of Charge genutzt werden. Der HPB Feststoffakku ist nicht nur tiefentladefest, sondern auch schnellladef?hig: 2C/2C (also halbst?ndlich) laden/entladen sind als Dauerbelastung m?glich, die Minutenbelastbarkeit liegt

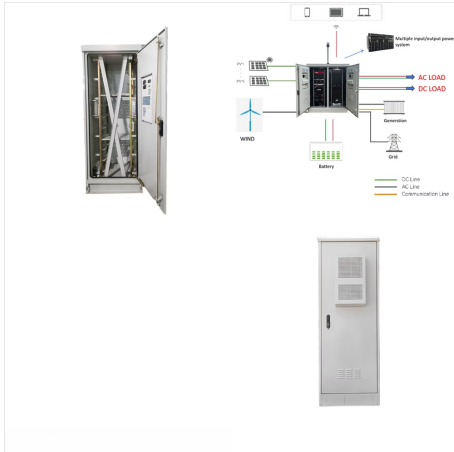


A team of scientists working for Bonn-based company High Performance Battery (HPB), led by Prof. Dr. G?nther Hambitzer, has achieved a decisive breakthrough in battery and storage technology with the development of the world's first solid-state battery with outstanding properties to production readiness.



Overall, HPB solid-state batteries and HPB solid-state electrolyte make an important contribution to the energy and mobility transition and to reducing dependence on raw materials. While the annual demand for storage was still 180 gigawatt-hours in 2018, it is expected to exceed 2,000 gigawatt-hours by 2030.

MOZAMBIQUE HPB SOLID STATE BATTERY



Compared to the liquid electrolytes commonly used today, the HPB solid-state electrolyte has an enormously improved conductivity. This is decisive for the available power from the battery cell. The HPB solid-state electrolyte shows an absolutely higher conductivity at -40°C than conventional liquid electrolytes at their optimum at $+60^{\circ}\text{C}$.



Bonn, Germany-based High Performance Battery (HPB), a startup specializing in the research and development of high-tech batteries, has developed what it reports to be the world's first solid-state battery ready for ???



Den Bonn-baserede virksomhed High Performance Battery (HPB) hævder at have opnået et kvantespring i batteriteknologi. Mens konventionelle lithium-ion-batterier skal udskiftes efter omkring 1.250 ???