
Stellantis develops new battery technology

Von Walther Wuttke

No, Stellantis is not entering the hotel industry and taking over the Ibis hotel chain, even though the latest project from the Group's development department is being launched under the name Ibis. Instead, the abbreviation stands for Intelligent Battery Integrated System and is intended to revolutionize battery technology for electric vehicles.

Together with the company Saft (part of Total Energies) and the French National Center for Scientific Research (Centre National de la Recherche Scientifique, CNRS), a new type of energy storage system was created after a four-year development phase, in which the inverter and charging function are integrated into the battery. Three years ago, the partners presented the first prototype of the new technology, and the testing phase is now beginning. Ibis is now being tested in a Peugeot E-3008, and the new battery type is scheduled to go into series production by the end of the decade. The 65 kWh energy storage system consists of 24 lithium-ion modules with a total of 288 cells.

In the Ibis concept, the electronic converter boards for the inverter and charging functions are positioned as close as possible to the lithium-ion cells in the battery housing, enabling alternating current to be generated for the electric motor thanks to a newly developed control system. The new concept is intended to reduce consumption by ten percent in the WLTP cycle and extend the service life of the battery by another ten percent.

In addition, the individual modules can be replaced more easily in the workshops if they show weaknesses, thus extending the service life of the energy storage system. At the same time, performance is improved by 15 percent and the risk of short circuits is also reduced. Stellantis promises that reliability will improve by a factor of three thanks to Ibis.

Another advantage of Ibis is the weight and space saving of 40 kilograms or 17 liters compared to the conventional placement of the rectifier and charger. "We can use this space saving for a larger trunk in the engine compartment or for improved aerodynamics, for example," says project manager Francis Roy, describing the advantages of the new technology, which can also be used for solid-state batteries. Ibis also has a positive effect on charging and shortens charging times. At the same time, the developers hope to reduce production costs. (aum)

Images for article



Photo: Stellantis via Autoren-Union Mobilität

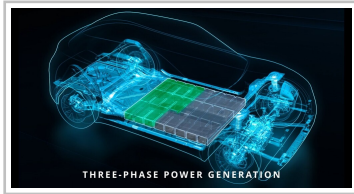


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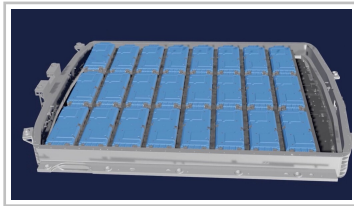


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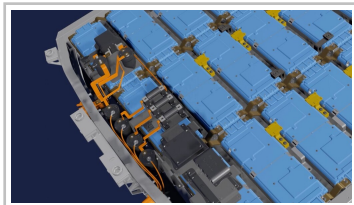


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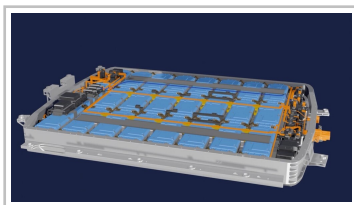


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