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NEWS



Multibeam Headlights in the Mercedes-Benz CLS-Class

In the next-generation Mercedes-Benz CLS-Class Daimler banks on the grid LED lighting technology. The new Multibeam LED headlamps are exceptionally bright and automatically illuminate the road surface with a previously unsurpassed, precision-controlled distribution of light – without dazzling others. Also unique are the anticipatory, camera-based active light function and the cornering light function with added, navigation-assisted functionality for roundabouts.

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Modular Design for LED Glare Free High Beam

Headlamps and their lighting technology shall give a sense of safety but have also to face demands for high performance, low energy and a great styling potential. Until now, the functionality of safety and assistance glare free high beam was only possible with xenon (HID) technology. In cooperation with Volkswagen, Valeo developed a new headlamp for the VW Passat (B8) which now fulfils the requirements in LED technology. It is built-up on a modular basis with use of two modules: one which integrates the glare free high beam function (multi-functional module) and an additional one (complementary module) for styling and performance.

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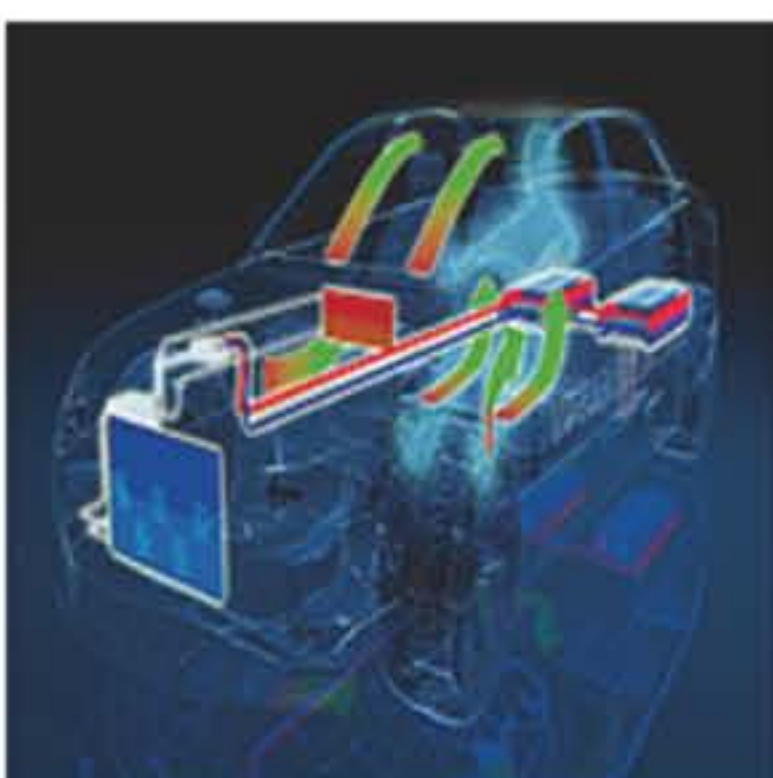
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Flexible Tail Lamp Design

Vehicle design is crucial for brand identity. With Flexible Lighting Hyundai presents an application that uses a light source with a mechanically flexible structure. The LED package of the module utilises an optical resin and a thin reflector film to provide a surface lighting image and enable creative tail lamp designs with a particularly high curvature.

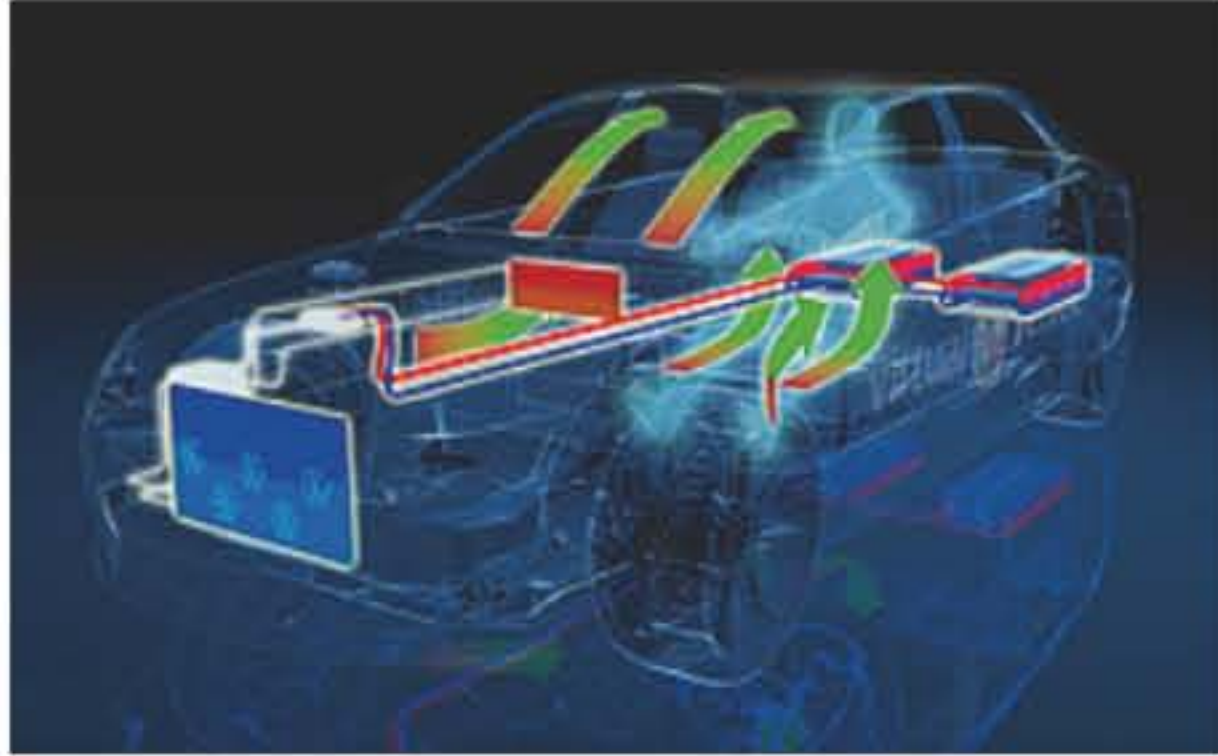
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Energy-efficient Defrosting of Heat Pump Systems for Passenger Cars

The energy efficiency of air source heat pump systems is reduced by the formation of frost on the exterior heat exchanger and in addition due to necessary defrosting. The Virtual Vehicle Research Center is working together with the Institute of Thermal Engineering of Graz University of Technology on the optimisation of the heat pump process including defrosting by means of test bench measurements and simulation.

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