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Daniel Hoppe

Bertrandt Ingenieurbüro GmbH

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APPLY 3D PRINT COMPONENTS TO IMPROVE AERODYNAMICS ON A VEHICLE

Technical task:

The task of the technical innovation is to optimize the aerodynamics of vehicles.

Initial situation:

In most cases, components for improving the aerodynamics are attached to vehicles. These are usually rigidly connected to the vehicle.

Solution:

The technology of 3D printing makes it possible to produce components that change the shape under pressure. As a result, the curvature can be influenced. If you now install several of these components on a vehicle and spans them with flexible material (convertible top, neoprene, etc.), a variable area is created, which can be used to improve the aerodynamics of vehicles.

The technical implementation is carried out by a triangular component which is printed in the 3D printer in one printing operation. Thereby, by means of a force, it is possible to deform this component and thus to adjust the position of the component change. In order to realize a large area, the intermediate areas are covered with a flexible material and thus result in a bendable area at the rear or the front of a vehicle.

Advantages:

- The vehicle can adapt to the conditions and, if necessary, generate aerodynamic advantages.

Possible application:

- Can be used for all vehicles.

Technical innovation

