

Title (en)  
RAILWAY VEHICLE WITH SELF-SUPPORTING CAR BODY

Title (de)  
SCHIENENFAHRZEUG MIT SELBSTTRAGENDEM WAGENKASTEN

Title (fr)  
VEHICULE SUR RAILS A SUPERSTRUCTURE AUTOPORTEUSE

Publication  
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Application  
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Priority  
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Abstract (en)  
[origin: US6647897B1] The invention relates to a railway vehicle with a self-supporting car body having a floor and a roof as well as side walls which present windows and access areas. The side walls are each made of a frame which is rigidly connected to the floor and presents side wall elements. The car body skin elements are configured in a supporting manner and fixed to frame elements (2) by friction so as to form a ribbed plate support structure (1, 8). The car body skin elements comprise an integrated intermediate layer (5) having vibration-damping properties. Frictional adhesive joints (7) or frictional screw or rivet joints (9) between the frame elements (2) and supporting car body skin elements can be provided for. The supporting car body skin elements are configured as supporting sandwich elements (3) which consist of an outer layer (4), an inner layer (6) and an intermediate layer (5) which has heat- and/or sound-insulating and vibration-damping properties and maintains the outer and inner layer at a distance from each other.

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