

Title (en)  
RAIL VEHICLE HAVING CENTRAL BUFFER COUPLING

Title (de)  
SCHIENENFAHRZEUG MIT MITTELPUFFERKUPPLUNG

Title (fr)  
VÉHICULE FERROVIAIRE À COUPLAGE TAMPON CENTRAL

Publication  
**EP 4294695 A1 20231227 (DE)**

Application  
**EP 22710068 A 20220303**

Priority  
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Abstract (en)  
[origin: WO2022214246A1] The invention relates to a rail vehicle having a central buffer coupling. The central buffer coupling (MPK) has a coupling head (KPK), a rod-shaped coupling shaft (KPS) and a spring mechanism (FDW) as elements. The coupling head (KPK) is designed for connection to a coupling head of another rail vehicle and is connected to the coupling shaft (KPS). Said shaft is inserted into the spring mechanism (FDW) and is mounted and fastened therein in such a way that, during operation of the rail vehicle, impact forces or tensile forces acting on the coupling head (KPK) are resiliently absorbed by the spring mechanism (FDW) and transferred to a wagon body (WK). A support (PAS) is coupled to the coupling shaft (KPS) and is connected to the wagon body (WK). A collision element (CB), which is rigidly but detachably connected to both the support (ABS) and the wagon body (WK), is arranged between the support (ABS) and the wagon body (WK). The collision element (CB) has a deformation region (DB) which is designed such that kinetic energy, which is transferred to the collision element (CB) via the coupling shaft (KPS) and via the coupled support (PAS) in the event of a collision, irreversibly deforms the deformation region (DB) in a predetermined manner.

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