

Title (en)

PULLING AND PUSHING DEVICE FOR A CENTRAL BUFFER COUPLING OF RAIL VEHICLES

Title (de)

ZUG- UND STOSSVORRICHTUNG FÜR MITTELPUFFERKUPPLUNGEN VON SCHIENENFAHRZEUGEN

Title (fr)

DISPOSITIF DE TRACTION ET DE POUSSEE POUR DES ATTELAGES A TAMPON CENTRAL DE VEHICULES SUR RAILS

Publication

EP 1858741 A1 20071128 (DE)

Application

EP 06707488 A 20060309

Priority

- EP 2006002168 W 20060309
- DE 202005004502 U 20050317

Abstract (en)

[origin: WO2006097239A1] The invention relates to a pulling and pushing device (100) which comprises a coupling arm (2) for a central buffer coupling of rail vehicles, is flangedly-mounted on the chassis (1) of the rail vehicle and elastically maintains the coupling arm (2) with the coupling head thereof by means of a hinge (3), preferably a stabilisation hinge, hingeable on a hinge pin (4). The inventive device withstands pressure forces in a pressure direction (56) when the hinge spring clearance (7) is exceeded without play by means of a pressure plate (8) and a pressure-sided energy absorption system (9) which is placed downstream and is prestressed on the chassis (1) by means of an external housing (10). The aim of said invention is to design a pulling and pushing flanged-mountable device which comprises a high-energy absorption system providing an optimal protection in the event of a crash with a non-linear characteristic curve of a spring system for damping longitudinal vibrations during a drive and mounting in a free-play manner the coupling arm used for reducing shocks and slack actions during travelling. For this purpose, the pressure-sided multilayer energy absorption system (9) and a pull-sided energy absorption system (11) are serially connected inside the housing (10).

IPC 8 full level

B61G 9/04 (2006.01); **B61D 15/06** (2006.01); **B61G 9/22** (2006.01)

CPC (source: EP)

B61D 15/06 (2013.01); **B61G 9/04** (2013.01); **B61G 9/22** (2013.01)

Citation (search report)

See references of WO 2006097239A1

Cited by

EP4339064A1; CN109178025A

Designated contracting state (EPC)

AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IS IT LI LT LU LV MC NL PL PT RO SE SI SK TR

DOCDB simple family (publication)

WO 2006097239 A1 20060921; AT E430077 T1 20090515; CN 101142115 A 20080312; CN 101142115 B 20120404;
DE 202005004502 U1 20050519; DE 502006003602 D1 20090610; EP 1858741 A1 20071128; EP 1858741 B1 20090429;
PL 1858741 T3 20091030; RU 2007138391 A 20090427; RU 2384442 C2 20100320

DOCDB simple family (application)

EP 2006002168 W 20060309; AT 06707488 T 20060309; CN 200680008559 A 20060309; DE 202005004502 U 20050317;
DE 502006003602 T 20060309; EP 06707488 A 20060309; PL 06707488 T 20060309; RU 2007138391 A 20060309