

Title (en)
PLUNGER BUFFER

Title (de)
HÜLSENPUFFER

Title (fr)
TAMPON PLONGEUR

Publication
EP 1305199 B1 20060705 (DE)

Application
EP 01956561 A 20010725

Priority
• DE 10037050 A 20000729
• EP 0108617 W 20010725

Abstract (en)
[origin: WO0209996A1] The invention relates to a plunger buffer for mobile support structures (2), in particular for rail vehicles, comprising a buffer housing (10), a baseplate (11) that is fastened to the support structure (2) in a fixed manner, a guide plunger (12) attached to the baseplate (11) and a displacement member (13) that can be displaced in relation to said guide plunger (12). The displacement member (13) is directed in its displacement by the guide plunger (12). The plunger buffer also comprises a force transmission member (20) for flexibly coupling the displacement member (13) to the support structure (2). The buffer housing (10) is configured in such a way that the guide plunger (12) or the displacement member (13) is deformed in a controlled manner above a threshold value for the displacement of said displacement member (13) or for the forces to be transmitted, without deforming or altering the bedding of the baseplate (11). The aim of the invention is to ensure that the plunger buffer (1) can absorb energy by deformation and nevertheless be configured with the same dimensions and fittings as known plunger buffers, thus enabling plunger buffers to be interchangeable in existing rail vehicles. To achieve this, the force transmission member (20) is configured in such a way that in addition to the controlled deformation of the guide plunger (12) or the displacement member (13), the function of the force transmission member (20) is overridden above the threshold value for the displacement of the displacement member (13) or for the forces to be transmitted.

IPC 8 full level
B61G 11/16 (2006.01)

CPC (source: EP)
B61G 11/16 (2013.01)

Cited by
DE102018103844A1; CN107972613A; US2022242461A1; US12122433B2; EP3530544A1

Designated contracting state (EPC)
AT BE CH CY DE DK ES FI FR GB GR IE IT LI LU MC NL PT SE TR

DOCDB simple family (publication)
WO 0209996 A1 20020207; AT E332260 T1 20060715; AU 7850701 A 20020213; CZ 20024271 A3 20030416; CZ 297793 B6 20070328; DE 10037050 A1 20020228; DE 10037050 C2 20021031; DE 50110406 D1 20060817; EP 1305199 A1 20030502; EP 1305199 B1 20060705; ES 2267798 T3 20070316; PL 199598 B1 20081031; PL 359387 A1 20040823; SI 21092 A 20030630; SI 21092 B 20100930; SK 287518 B6 20101207; SK 832003 A3 20030805

DOCDB simple family (application)
EP 0108617 W 20010725; AT 01956561 T 20010725; AU 7850701 A 20010725; CZ 20024271 A 20010725; DE 10037050 A 20000729; DE 50110406 T 20010725; EP 01956561 A 20010725; ES 01956561 T 20010725; PL 35938701 A 20010725; SI 200120040 A 20010725; SK 832003 A 20010725