

Title (en)
GAS SPRING SYSTEM FOR A VEHICLE

Title (de)
GASFEDERSYSTEM FÜR EIN FAHRZEUG

Title (fr)
SYSTÈME À RESSORT À GAZ POUR VÉHICULE [

Publication
EP 2551168 A2 20130130 (EN)

Application
EP 12189763 A 20090922

Priority
• EP 09170943 A 20090922
• GB 0817305 A 20080922

Abstract (en)
The invention relates to a gas spring device for a vehicle, in particular a rail vehicle, comprising a gas spring unit (106) and an emergency spring unit (107), the gas spring unit comprising a first housing part (106.1), a second housing part (106.2) and a bellows (106.3). The bellows (106.3) moveably connects the first housing part (106.1) and the second housing part (106.2) such that a substantially gas tight gas spring chamber (106.4) is confined by the bellows (106.3), the first housing part (106.1) and the second housing part (106.2). The first housing part (106.1) is adapted to be connected to a loading structure (102) while the second housing part (106.2) is adapted to be connected to a support structure (103) adapted to support a load exerted by the loading structure (102). The gas spring unit (106) has an inflated state and a deflated state, the gas spring unit (106) being adapted to resiliently support the load exerted by the loading structure (102) on the support structure (103) in the inflated state, the emergency spring unit (107) being adapted to resiliently support the load exerted by the loading structure (102) on the support structure (103) in the deflated state. The emergency spring unit (107) has a first end (107.3) and a second end (107.4) and a longitudinal axis (107.5) extending between the first end and the second end, the emergency spring unit (107) being connected to the first housing part (106.1) or the second housing part (106.2) in such a manner that one end (107.4) of the emergency spring unit (107), in the inflated state, is a free end. The free end (107.4) of the emergency spring unit (107) is located closer to the bellows (106.3) than the other end (107.3) of the emergency spring unit (107).

IPC 8 full level
B61F 5/14 (2006.01)

CPC (source: EP)
B61F 5/148 (2013.01)

Designated contracting state (EPC)
AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO SE SI SK SM TR

DOCDB simple family (publication)
EP 2165911 A1 20100324; EP 2165911 B1 20161214; EP 2551168 A2 20130130; EP 2551168 A3 20130522; EP 2551168 B1 20170201; ES 2616556 T3 20170613; ES 2622965 T3 20170710; GB 0817305 D0 20081029; GB 2463690 A 20100324

DOCDB simple family (application)
EP 09170943 A 20090922; EP 12189763 A 20090922; ES 09170943 T 20090922; ES 12189763 T 20090922; GB 0817305 A 20080922