

Title (en)  
VEHICLE HAVING PITCH COMPENSATION

Title (de)  
FAHRZEUG MIT WANKKOMPENSATION

Title (fr)  
VÉHICULE À COMPENSATION DU ROULIS

Publication  
**EP 2414208 B1 20240313 (DE)**

Application  
**EP 10742870 A 20100330**

Priority

- IB 2010001593 W 20100330
- DE 102009014866 A 20090330
- DE 202009015736 U 20091118
- AT 7332009 U 20091119
- IT MI20090372 U 20091119

Abstract (en)  
[origin: CA2756252A1] The invention relates to a vehicle, in particular a rail vehicle, having a car body (102) that is supported on an undercarriage (104) via a suspension (103) in the direction of a vehicle vertical axis and a roll compensation device (105) that is coupled to the car body (102) and the undercarriage (104). The roll compensation device (105) can be in particular arranged kinematically parallel to the suspension (103). During cornering, the roll compensation device (105) counteracts roll movements of the car body (102) to the outside of the curve around a roll axis parallel to a vehicle longitudinal axis. To increase inclination comfort, the roll compensation device (105) is designed to characterize a first roll angle around the roll axis to the car body (102) in a first frequency region under a first transverse excursion of the car body (102) in the direction of a vehicle transverse axis that corresponds to a current curvature of a rail section currently being traversed. Furthermore, the roll compensation device (105) is designed to characterize a second transverse excursion overlapping the first transverse excursion in a second frequency range to the car body (102) in order to increase vibration comfort, wherein the second frequency range lies at least partially, in particular completely, outside of the first frequency range.

IPC 8 full level  
**B61F 5/24** (2006.01)

CPC (source: EP KR US)  
**B61F 5/24** (2013.01 - EP KR US)

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)  
**DE 202009015736 U1 20100429**; AT 11080 U2 20100415; AT 11080 U3 20130515; AT 11080 U8 20100515; AU 2010230407 A1 20111027; AU 2010230991 A1 20111027; CA 2756252 A1 20101007; CA 2756399 A1 20101007; CN 102448790 A 20120509; CN 102448790 B 20150527; CN 102448791 A 20120509; DE 102009014866 A1 20101028; DE 102009014866 A9 20110210; EP 2414207 A1 20120208; EP 2414207 B1 20191023; EP 2414208 A2 20120208; EP 2414208 B1 20240313; ES 2764966 T3 20200605; ES 2978901 T3 20240923; IL 215277 A0 20111130; IL 215344 A0 20111229; IT MI20090372 U1 20100930; JP 2012521925 A 20120920; JP 2012521931 A 20120920; KR 20110138264 A 20111226; KR 20120024574 A 20120314; RU 2011143761 A 20130510; RU 2011143762 A 20130510; US 2012118194 A1 20120517; US 2012137926 A1 20120607; US 8356557 B2 20130122; WO 2010112306 A1 20101007; ZA 201106990 B 20120530; ZA 201106991 B 20121031

DOCDB simple family (application)  
**DE 202009015736 U 20091118**; AT 7332009 U 20091119; AU 2010230407 A 20100309; AU 2010230991 A 20100330; CA 2756252 A 20100309; CA 2756399 A 20100330; CN 201080023176 A 20100309; CN 201080023177 A 20100330; DE 102009014866 A 20090330; EP 10707054 A 20100309; EP 10742870 A 20100330; EP 2010052978 W 20100309; ES 10707054 T 20100309; ES 10742870 T 20100330; IL 21527711 A 20110921; IL 21534411 A 20110925; IT MI20090372 U 20091119; JP 2012502543 A 20100309; JP 2012502831 A 20100330; KR 20117025982 A 20100330; KR 20117025983 A 20100309; RU 2011143761 A 20100309; RU 2011143762 A 20100330; US 201013259476 A 20100330; US 201013259565 A 20100309; ZA 201106990 A 20110923; ZA 201106991 A 20110923