

Title (en)

RAILWAY VEHICLE AND VIBRATION DAMPING AND SUSPENSION DEVICE THEREOF

Title (de)

SCHIENENFAHRZEUG UND VIBRATIONS DÄMPFENDE UND AUFHÄNGUNGSVORRICHTUNG DAFÜR

Title (fr)

VÉHICULE FERROVIAIRE ET DISPOSITIF DE SUSPENSION ET D'AMORTISSEMENT DES VIBRATIONS DE CELUI-CI

Publication

**EP 3239014 A1 20171101 (EN)**

Application

**EP 16203183 A 20161209**

Priority

CN 201610280085 A 20160429

Abstract (en)

A railway vehicle and a vibration damping and suspension device thereof are provided according to the present application. The vibration damping and suspension device includes a top cover, an elastic annular member and an outer sleeve. The top cover has an inner positioning pillar and an outer gland, the outer sleeve is fixedly connected to the elastic annular member and the inner positioning pillar is fixedly inserted in the elastic annular member. Both the outer sleeve and the elastic annular member are provided with a gap extending in a radial direction, thus the outer gland can pre-press the elastic annular member against the inner positioning pillar in the radial direction by the outer sleeve. The vibration damping and suspension device has a great universality and can function as a primary suspension device, a secondary suspension device and/or an elastic side bearing. When the vibration damping and suspension device is subjected to a vertical downward outer loading, the elastic annular member generates an elastic deformation to drive the top cover to slide downward with respect to the outer sleeve, thereby realizing the vibration damping function and forming an upward vertical frictional damping at the same time. When the vehicle vibrates, the elastic annular member moves upward to drive the outer sleeve to move upward, to form a downward vertical frictional damping, thereby improving the stability and safety of the vehicle running at a high speed.

IPC 8 full level

**B61F 5/08** (2006.01); **B61F 5/14** (2006.01); **B61F 5/30** (2006.01)

CPC (source: CN EP)

**B61F 5/08** (2013.01 - CN EP); **B61F 5/142** (2013.01 - EP); **B61F 5/24** (2013.01 - CN); **B61F 5/305** (2013.01 - CN EP)

Citation (applicant)

- CN 200620147882 U 20061215
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Citation (search report)

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Designated contracting state (EPC)

AL 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 RS SE SI SK SM TR

Designated extension state (EPC)

BA ME

DOCDB simple family (publication)

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DOCDB simple family (application)

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