Title (en)

Vibration suppression device for railway vehicle

Title (de)

Vorrichtung zur Schwingungsunterdrückung für ein Schienenfahrzeug

Title (fr)

Dispositif de suppression des vibrations pour véhicule ferroviaire

Publication

EP 2020356 A3 20090909 (EN)

Application

EP 08013274 A 20080723

Priority

KR 20070076123 A 20070730

Abstract (en)

[origin: EP2020356A2] A vibration suppression device that suppresses vibration in a railway vehicle 1 includes a damper 9 having a variable damping force, which extends and compresses in accordance with lateral vibration of a vehicle body 10 relative to a bogie 3, first control means that control the damping force of the damper 9 using sky-hook semi-active control in order to suppress the lateral vibration of the vehicle body 10, vertical direction acceleration detecting means 15 that detect acceleration in a vertical direction of the vehicle body 10, determining means that determine whether or not lateral vibration has occurred in the bogie 3 on the basis of the acceleration detected by the vertical direction acceleration detecting means 15, second control means that cause the damper 9 to operate so as to suppress the lateral vibration of the bogie (3), and switching control means that switch from the first control means to the second control means when lateral vibration is determined to have occurred in the bogie 3.

IPC 8 full level

B61F 5/24 (2006.01)

CPC (source: EP KR)

B61F 5/00 (2013.01 - KR); **B61F 5/12** (2013.01 - KR); **B61F 5/245** (2013.01 - EP)

Citation (search report)

- [A] JP 2007131204 A 20070531 - RAILWAY TECHNICAL RES INST, et al
- [A] JP 2006327529 A 20061207 - KAWASAKI HEAVY IND LTD
- [A] EP 0704364 A1 19960403 - KAYABA INDUSTRY CO LTD [JP], et al

Cited by

CN103097224A; EP2990294A1

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 MT NL NO PL PT RO SE SI SK TR

Designated extension state (EPC)

AL BA MK RS

DOCDB simple family (publication)

EP 2020356 A2 20090204; **EP 2020356 A3 20090909**; **EP 2020356 B1 20101201**; AT E490143 T1 20101215; DE 602008003719 D1 20110113; DK 2020356 T3 20110307; ES 2353485 T3 20110302; KR 101300893 B1 20130827; KR 20090012376 A 20090204

DOCDB simple family (application)

EP 08013274 A 20080723; AT 08013274 T 20080723; DE 602008003719 T 20080723; DK 08013274 T 20080723; ES 08013274 T 20080723; KR 20070076123 A 20070730