

Title (en)

ACTIVE WHEEL SET CONTROL FOR A RAILWAY VEHICLE

Title (de)

AKTIVE RADSATZSTEUERUNG FÜR EIN SCHIENENFAHRZEUG

Title (fr)

COMMANDE ACTIVE DE TRAIN DE ROUES POUR UN VÉHICULE FERROVIAIRE

Publication

EP 3967568 B1 20221221 (DE)

Application

EP 21193267 A 20210826

Priority

DE 102020123592 A 20200910

Abstract (en)

[origin: CN114162165A] The present disclosure relates to an active wheelset control device for a rail vehicle, comprising: a wheelset having a wheelset for rolling on a respective rail of a rail pair; a length-variable hydraulically operated first differential cylinder to move a first wheel of the wheelset relative to the chassis frame; a second hydraulically operated differential cylinder having a variable length to move a second wheel of the wheelset relative to the chassis frame; and a supply unit for supplying pressurized fluid to the first cylinder and the second cylinder. The wheelset control device is characterized in that a check valve is arranged in the piston of the first cylinder and in the piston of the second cylinder, which check valve allows fluid flow from the piston chamber to the annular chamber, the annular chamber of the first cylinder and the annular chamber of the second cylinder being fluidically connected to a common high-pressure output of the supply unit, and the annular chamber of the first cylinder and the annular chamber of the second cylinder being fluidically connected to a common high-pressure output of the supply unit. The piston chamber of the first cylinder is fluidly connected to the first control output, and the piston chamber of the second cylinder is fluidly connected to the second control output of the supply unit.

IPC 8 full level

B61F 5/38 (2006.01); **F15B 13/02** (2006.01)

CPC (source: CN EP)

B61F 5/386 (2013.01 - CN EP)

Citation (opposition)

Opponent : ALSTOM Holdings

- WO 2017157740 A1 20170921 - SIEMENS AG OESTERREICH [AT]
- EP 0060147 A2 19820915 - DEERE & CO [US]
- CN 104196806 A 20141210 - WUHU GAOCHANG HYDRAULIC ELECTRICAL TECHNOLOGY CO LTD
- CN 104500471 A 20150408 - SOUTHWEST ALUMINUM GROUP CO
- EP 2133576 A2 20091216 - LIEBHERR AEROSPACE GMBH [DE]
- EP 2805871 A2 20141126 - JTEKT CORP [JP]

Designated contracting state (EPC)

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DOCDB simple family (publication)

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DE 102020123592 A1 20220310; ES 2940579 T3 20230509

DOCDB simple family (application)

EP 21193267 A 20210826; CN 202111056224 A 20210909; DE 102020123592 A 20200910; ES 21193267 T 20210826