

Title (en)

RAIL VEHICLE HAVING A STARTING ASSISTANCE FUNCTION BASED ON FRICTIONAL BRAKING FORCES

Title (de)

SCHIENENFAHRZEUG MIT EINER AUF REIBUNGSBREMSKRÄFTEN BASIERENDEN ANFAHRHILFUNKTION

Title (fr)

VÉHICULE FERROVIAIRE COMPORTANT UNE FONCTION D'AIDE AU DÉMARRAGE SE FONDANT SUR DES FORCES DE FREINAGE PAR FRICTION

Publication

EP 3645353 A1 20200506 (DE)

Application

EP 18735506 A 20180612

Priority

- DE 102017114610 A 20170630
- EP 2018065529 W 20180612

Abstract (en)

[origin: WO2019001951A1] The invention relates to a rail vehicle having a braking device and a sensor device (48) comprising at least one sensor, which sensor device directly or indirectly detects the friction braking force (FHR) and/or the friction braking torque (MHR) or a variable derived from the friction braking force (FHR) and/or from the friction braking torque (MHR) and generates an electric force signal (42) dependent on the detected friction braking force (FHR) and/or on the detected friction braking torque (MHR) or on the detected derived variable and integrates it in an electronic control device (6). According to the invention, a brake housing (32) of the braking device is mounted on a console (34) of the chassis (2) hinged by a hinge-type bearing (46) and by a support (50) supporting the at least one sensor of the sensor device (48), in such a way that, as a result of the friction braking force (FHR) created by frictional contact between a brake lining (30) and a brake disc (24), a torque on the brake housing (32) around the hinge-type bearing (46) and a resultant reaction force are generated in the support (50), which torque and reaction force are measured by the at least one sensor of the sensor device (48) directly or indirectly, with the sensor device (48) generating the force signal (42) on the basis of the reaction force.

IPC 8 full level

B60T 13/66 (2006.01); **B60L 15/20** (2006.01); **B60T 7/12** (2006.01); **B60T 8/17** (2006.01); **B60T 8/52** (2006.01); **B60T 17/22** (2006.01);
G01L 5/28 (2006.01)

CPC (source: EP)

B60L 15/2018 (2013.01); **B60L 15/2081** (2013.01); **B60T 7/122** (2013.01); **B60T 8/1705** (2013.01); **B60T 8/172** (2013.01); **B60T 8/52** (2013.01);
B60T 13/665 (2013.01); **B60T 17/228** (2013.01); **G01L 5/28** (2013.01); **B60L 2200/26** (2013.01); **B60T 2201/06** (2013.01); **Y02T 10/64** (2013.01);
Y02T 10/72 (2013.01)

Citation (search report)

See references of WO 2019001949A1

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)

WO 2019001951 A1 20190103; DE 102017009125 A1 20190103; DE 102017009127 A1 20190103; EP 3645353 A1 20200506;
EP 3645354 A1 20200506; EP 3645354 B1 20210421; EP 3645355 A1 20200506; WO 2019001949 A1 20190103; WO 2019001950 A1 20190103

DOCDB simple family (application)

EP 2018065539 W 20180612; DE 102017009125 A 20170929; DE 102017009127 A 20170929; EP 18735506 A 20180612;
EP 18737154 A 20180612; EP 18742400 A 20180612; EP 2018065529 W 20180612; EP 2018065534 W 20180612