

Title (en)

METHOD FOR CHECKING FUNCTIONING OF A PRESSURE MEDIUM-OPERATED ELECTRONIC BRAKE SYSTEM OF A VEHICLE

Title (de)

VERFAHREN ZUR FUNKTIONSÜBERPRÜFUNG EINES DRUCKMITTELBETRIEBENEN ELEKTRONISCHEN BREMSSYSTEMS EINES FAHRZEUGS

Title (fr)

PROCÉDÉ DE CONTRÔLE DU FONCTIONNEMENT D'UN SYSTÈME DE FREINAGE ÉLECTRONIQUE À FLUIDE SOUS PRESSION D'UN VÉHICULE

Publication

**EP 4370391 A1 20240522 (DE)**

Application

**EP 22744191 A 20220713**

Priority

- DE 102021118006 A 20210713
- EP 2022069656 W 20220713

Abstract (en)

[origin: WO2023285559A1] The invention relates to a method for checking functioning of a pressure medium-operated electronic brake system (2) of a vehicle (1), having a valve and sensor device (6), referred to as an axle modulator, having at least one brake cylinder (9, 13) for operating the brake of a vehicle wheel (7, 11), having at least one anti-lock brake system solenoid control valve (15, 16) associated with the at least one brake cylinder, and having an electronic control unit (5) which is electrically connected to the valve and sensor device and to the at least one anti-lock brake system solenoid control valve, wherein the anti-lock brake system solenoid control valve has an inlet valve (17) for ventilating the brake cylinder and an outlet valve (18) for venting the brake cylinder and at the input end is pneumatically connected to the valve and sensor device and at the output end is pneumatically connected to the brake cylinder. In order to check functioning of the anti-lock brake system solenoid control valve, provision is made for said anti-lock brake system solenoid control valve to be temporarily actuated and supplied with pressure by means of the electronic control unit and the valve and sensor device in such a way that a pressure is built up at the input end of the anti-lock brake system solenoid control valve even though no build up in pressure or a reduction in pressure after an interim build up in pressure is expected in the associated brake cylinder, and that a malfunction in the anti-lock brake system solenoid control valve is identified when, during this functional check, a response of the vehicle on account of a build up in pressure or on account of a reduction in pressure not having taken place after a build up in pressure is established in the brake cylinder, contrary to expectations.

IPC 8 full level

**B60T 13/68** (2006.01); **B60T 17/22** (2006.01)

CPC (source: EP US)

**B60T 8/327** (2013.01 - US); **B60T 13/683** (2013.01 - EP US); **B60T 17/221** (2013.01 - EP); **B60T 17/222** (2013.01 - US); **B60T 8/1708** (2013.01 - US)

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

Designated validation state (EPC)

KH MA MD TN

DOCDB simple family (publication)

**DE 102021118006 A1 20230119**; CN 117580742 A 20240220; EP 4370391 A1 20240522; US 2024157927 A1 20240516; WO 2023285559 A1 20230119

DOCDB simple family (application)

**DE 102021118006 A 20210713**; CN 202280045114 A 20220713; EP 2022069656 W 20220713; EP 22744191 A 20220713; US 202418412286 A 20240112