

Title (en)

METHOD FOR BRAKING A VEHICLE AND BRAKING SYSTEM

Title (de)

VERFAHREN ZUM BREMSEN EINES FAHRZEUGS UND BREMSSYSTEM

Title (fr)

PROCÉDÉ DE FREINAGE D'UN VÉHICULE ET SYSTÈME DE FREINAGE

Publication

EP 4297998 A1 20240103 (DE)

Application

EP 21820491 A 20211125

Priority

- DE 102021104249 A 20210223
- EP 2021082922 W 20211125

Abstract (en)

[origin: WO2022179723A1] The invention relates to a method (M) for braking a vehicle, comprising: sensing (M1) a braking request signal which represents a target deceleration of the vehicle; generating (M21), by means of a first pressure generating device (10), a hydraulic brake pressure in a wheel-brake cylinder (1) based on the sensed braking request signal, which pressure generating device is hydraulically connected to the wheel-brake cylinder (1); detecting (M3) a fault state of the first pressure generating device (10); determining (M4) a replacement braking request signal, if a fault state of the first pressure generating device (10) is detected, wherein the replacement braking request signal is determined based on a target deceleration known at a predetermined time before the detection of the fault state; and generating (M5), by means of a brake pressure control system (120), a replacement brake pressure in the wheel-brake cylinder (1) based on the determined replacement braking request signal, which brake pressure control system has a second pressure generating device (20) which is hydraulically coupled to the wheel-brake cylinder. The invention also relates to a method (M) for braking a vehicle, in which the replacement braking request signal is determined based on a target deceleration, known at a predetermined time before the detection of the fault state, based on a braking torque generated by an electric machine kinematically coupled to a wheel of the vehicle. A further aspect of the invention relates to a braking system (100) for a vehicle.

IPC 8 full level

B60T 13/66 (2006.01); **B60T 13/74** (2006.01); **B60T 17/22** (2006.01)

CPC (source: EP KR US)

B60T 8/171 (2013.01 - US); **B60T 8/4081** (2013.01 - US); **B60T 8/94** (2013.01 - US); **B60T 13/588** (2013.01 - US); **B60T 13/62** (2013.01 - US);
B60T 13/662 (2013.01 - EP KR); **B60T 13/745** (2013.01 - EP KR); **B60T 17/22** (2013.01 - US); **B60T 17/221** (2013.01 - EP KR);
B60T 2220/04 (2013.01 - EP KR US); **B60T 2270/402** (2013.01 - US); **B60T 2270/404** (2013.01 - EP KR); **B60T 2270/406** (2013.01 - US);
B60T 2270/60 (2013.01 - EP); **B60T 2270/602** (2013.01 - EP KR); **B60T 2270/604** (2013.01 - EP KR); **B60T 2270/82** (2013.01 - EP KR);
B60T 2270/88 (2013.01 - US); **B60Y 2306/13** (2013.01 - KR); **B60Y 2400/81** (2013.01 - KR)

Citation (search report)

See references of WO 2022179723A1

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 102021104249 A1 20220825; CN 116867693 A 20231010; EP 4297998 A1 20240103; JP 2024506568 A 20240214;
KR 20230150829 A 20231031; US 2024025386 A1 20240125; WO 2022179723 A1 20220901

DOCDB simple family (application)

DE 102021104249 A 20210223; CN 202180094406 A 20211125; EP 2021082922 W 20211125; EP 21820491 A 20211125;
JP 2023547136 A 20211125; KR 20237032169 A 20211125; US 202118255962 A 20211125