

Title (en)

METHOD AND CONTROL DEVICE FOR CONTROLLING OPERATION OF A BRAKE SYSTEM OF A MOTOR VEHICLE

Title (de)

VERFAHREN UND STEUERVORRICHTUNG ZUM STEUERN DES BETRIEBS EINER BREMSANLAGE EINES KRAFTFAHRZEUGS

Title (fr)

PROCÉDÉ ET DISPOSITIF DE COMMANDE POUR COMMANDER LE FONCTIONNEMENT D'UN SYSTÈME DE FREIN D'UN VÉHICULE À MOTEUR

Publication

EP 3797056 A4 20220302 (EN)

Application

EP 19807499 A 20190515

Priority

- SE 1850591 A 20180521
- SE 2019050437 W 20190515

Abstract (en)

[origin: WO2019226095A1] The present invention relates to a method (M2) for controlling operation of a brake system of a vehicle. The method comprises determining (140) a maximum braking force (Fmax) for drive wheels of the at least one drive axle by means of a function expressing a dependence between wheel slip and braking force and based upon a chosen target wheel slip (WS); and determining a brake force (F) corresponding to a requested retardation (150) for the vehicle. The method further comprises determining (180) a maximum admissible braking force (Faux) to be exerted by means of the at least one auxiliary brake (A) for braking drive wheels of the at least one drive axle based upon a predetermined (170) vehicle service brake force distribution, the maximum braking force (Fmax) and the brake force (F) corresponding to the requested retardation for the vehicle; and controlling operation of the brake system based upon the maximum admissible braking force (Faux) and the brake force (F) corresponding to the requested retardation for obtaining the requested retardation with a maximum use of the at least one auxiliary brake (A). The present invention also relates to a control device for controlling operation of a brake system of a vehicle. The present invention also relates to a vehicle. The present invention also relates to a computer program and a computer readable medium.

IPC 8 full level

B60T 8/1763 (2006.01); **B60T 8/1766** (2006.01); **B60T 10/00** (2006.01); **B60T 13/58** (2006.01); **B60W 10/184** (2012.01); **B60W 10/196** (2012.01); **B60W 30/18** (2012.01); **B60W 40/068** (2012.01)

CPC (source: EP SE)

B60T 8/1766 (2013.01 - EP); **B60T 10/00** (2013.01 - SE); **B60T 13/58** (2013.01 - SE); **B60T 13/585** (2013.01 - EP); **B60W 10/08** (2013.01 - EP); **B60W 10/184** (2013.01 - EP SE); **B60W 10/196** (2013.01 - EP SE); **B60W 10/198** (2013.01 - EP); **B60W 30/18109** (2013.01 - EP); **B60W 30/18172** (2013.01 - EP); **B60W 40/068** (2013.01 - SE); **B60T 8/1763** (2013.01 - SE); **B60T 2240/06** (2013.01 - EP); **B60T 2260/08** (2013.01 - EP); **B60T 2270/604** (2013.01 - EP); **B60W 20/00** (2013.01 - EP); **B60W 2040/1307** (2013.01 - EP); **B60W 2520/26** (2013.01 - EP)

Citation (search report)

- [X] US 2003062770 A1 20030403 - SASAKI HIROKI [JP], et al
- [X] EP 2172378 A1 20100407 - FORD GLOBAL TECH LLC [US]
- [X] DE 102016215912 A1 20170406 - HYUNDAI MOTOR CO LTD [KR]
- [X] CN 106314163 A 20170111 - BEIJING CHANGCHENG HUAGUAN AUTOMOBILE TECH CO LTD
- See references of WO 2019226095A1

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

DOCDB simple family (publication)

WO 2019226095 A1 20191128; EP 3797056 A1 20210331; EP 3797056 A4 20220302; SE 1850591 A1 20191122; SE 541907 C2 20200107

DOCDB simple family (application)

SE 2019050437 W 20190515; EP 19807499 A 20190515; SE 1850591 A 20180521