

Title (en)

METHOD, CONTROL DEVICE, AND SYSTEM FOR DETERMINING A PROFILE DEPTH OF A PROFILE OF A TYRE

Title (de)

VERFAHREN, STEUEREINRICHTUNG UND SYSTEM ZUM ERMITTELN EINER PROFILTIEFE EINES PROFILS EINES REIFENS

Title (fr)

PROCÉDÉ, DISPOSITIF DE COMMANDE ET SYSTÈME PERMETTANT DE DÉTERMINER UNE PROFONDEUR D'UNE SCULPTURE D'UN PNEU

Publication

EP 3600920 A1 20200205 (DE)

Application

EP 18715518 A 20180320

Priority

- DE 102017204648 A 20170321
- EP 2018056946 W 20180320

Abstract (en)

[origin: WO2018172317A1] The invention relates to a method for determining a profile depth (td) of a profile (4) of a tyre (2) while a vehicle (1) having the tyre (2) is operating, a control device (20) for a vehicle (1) for determining a profile depth (td) of a profile (4) of a tyre (2) of the vehicle (1), and a system (20, 12) for a vehicle (1), having such a control device (20) and at least one electronic wheel unit (12), wherein there is provision for the profile depth (td) to be determined on the basis of a determined instantaneous dynamic wheel radius (r1dyn) of a wheel (W) of the vehicle (1) having the tyre (2) and a determined instantaneous dynamic internal radius (r2dyn) of the tyre (2). In order to improve the determination of the profile depth (td) with respect to accuracy, a correction variable (F) which is determined in advance for the type of tyre (2) is taken into account, said correction variable (F) characterizing the relationship between, on the one hand, a change in the profile depth (td) and, on the other hand, a resulting change in the difference between the dynamic wheel radius (r1dyn) and the dynamic internal radius (r2dyn).

IPC 8 full level

B60C 11/24 (2006.01)

CPC (source: EP US)

B60C 11/24 (2013.01 - EP); **B60C 11/243** (2013.01 - EP US); **B60C 11/246** (2013.01 - EP US)

Citation (search report)

See references of WO 2018172317A1

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 2018172317 A1 20180927; CN 110431026 A 20191108; DE 102017204648 A1 20180927; EP 3600920 A1 20200205; US 11230146 B2 20220125; US 2020070589 A1 20200305

DOCDB simple family (application)

EP 2018056946 W 20180320; CN 201880017837 A 20180320; DE 102017204648 A 20170321; EP 18715518 A 20180320; US 201816496297 A 20180320