

Title (en)

FUZZY-LOGIC-BASED CONTROL SYSTEM IN A MOTOR VEHICLE FOR CONTROLLING A SPEED OF THE MOTOR VEHICLE OR A BRAKE PRESSURE OF A BRAKE OF THE MOTOR VEHICLE

Title (de)

FUZZY-BASIERTES STEUERUNGSSYSTEM IN EINEM KRAFTFAHRZEUG ZUR STEUERUNG EINER GESCHWINDIGKEIT DES KRAFTFAHRZEUGS ODER EINES BREMSDRUCKS EINER BREMSE DES KRAFTFAHRZEUGS

Title (fr)

SYSTÈME DE COMMANDE À BASE DE LOGIQUE FLOUE DANS UN VÉHICULE À MOTEUR POUR LA COMMANDE D'UNE VITESSE DUDIT VÉHICULE À MOTEUR OU D'UNE PRESSION DE FREINAGE D'UN FREIN DU VÉHICULE À MOTEUR

Publication

**EP 3490855 A1 20190605 (DE)**

Application

**EP 17751271 A 20170720**

Priority

- DE 102016009257 A 20160729
- EP 2017068357 W 20170720

Abstract (en)

[origin: US2018029568A1] A fuzzy-based control system in a motor vehicle for controlling a speed comprises a brake pressure measurement unit, a signal processing unit and a control unit. The brake pressure measurement unit is adapted as a finite state machine to measure a current brake pressure of a brake of a wheel of the motor vehicle dependent on a trigger. The signal processing unit is adapted to estimate a current adhesion value  $\mu$  between a tyre associated with the wheel and the current ground, based on the current brake pressure of the brake and further measurement values. The estimating comprises an inference based on fuzzy rules and a fuzzification, a subsequently a defuzzification of the inference. The control unit is adapted to control a speed of the motor vehicle or the brake pressure of the brake, based on the estimated current adhesion value  $\mu$ .

IPC 8 full level

**B60T 8/172** (2006.01); **B60T 8/174** (2006.01)

CPC (source: EP US)

**B60T 8/171** (2013.01 - US); **B60T 8/172** (2013.01 - EP US); **B60T 8/174** (2013.01 - EP US); **B60T 8/1763** (2013.01 - US); **B60T 2210/122** (2013.01 - EP US); **B60T 2250/03** (2013.01 - US)

Citation (search report)

See references of WO 2018019698A1

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DOCDB simple family (publication)

**US 10569750 B2 20200225**; **US 2018029568 A1 20180201**; CN 109476288 A 20190315; CN 109476288 B 20210416; DE 102016009257 A1 20180201; EP 3490855 A1 20190605; WO 2018019698 A1 20180201

DOCDB simple family (application)

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