Title (en)

METHOD FOR DETERMINING THE DUTY FACTOR OF A PULSE-WIDTH-MODULATED SIGNAL BY MEANS OF A VEHICLE CONTROL UNIT, AND VEHICLE CONTROL UNIT

Title (de)

VERFAHREN ZUR ERMITTLUNG DES TASTVERHÄLTNISSES EINES PULSWEITENMODULIERTEN SIGNALS MITTELS EINES FAHRZEUGSTEUERGERÄTES UND FAHRZEUGSTEUERGERÄT

Title (fr)

PROCÉDÉ SERVANT À DÉTERMINER LE RAPPORT CYCLIQUE D'UN SIGNAL À MODULATION DE LARGEUR D'IMPULSION AU MOYEN D'UN APPAREIL DE COMMANDE DE VÉHICULE, ET APPAREIL DE COMMANDE DE VÉHICULE

Publication

EP 3177492 A1 20170614 (DE)

Application

EP 15738591 A 20150713

Priority

- DE 102014011706 A 20140805
- EP 2015001435 W 20150713

Abstract (en)

[origin: WO2016020036A1] For safety reasons, a redundant measurement of the duty factor of pulse-with-modulated signals 12 is performed in a vehicle control unit, such as in particular a brake control unit 10. Here, in the prior art, the duty factor of the pulse-width-modulated signal 12 is determined by way of a low-pass filter and an analogue-digital conversion and is compared with a value determined by way of a memory and comparison unit. According to the invention, a direct determination of the duty factor of the signal 12 is performed by way of periodic sampling. For this purpose, the durations of the states 18 and 20 of the signal 12 are determined with the aid of a clock signal 32. After one complete cycle, the duty factor can then be determined directly from the ratio of the durations of the states 18 and 20.

IPC 8 full level

B60T 8/88 (2006.01); **B60T 7/04** (2006.01)

CPC (source: CN EP US)

B60T 7/042 (2013.01 - CN EP US); **B60T 8/885** (2013.01 - CN EP US); **B60T 17/22** (2013.01 - US); **G07C 5/08** (2013.01 - US); B60T 2220/04 (2013.01 - CN EP US); B60T 2270/413 (2013.01 - CN EP US)

Citation (search report)

See references of WO 2016020036A1

Citation (examination)

- DE 1234310 B 19670216 - OSKAR VIERLING DR
- US 2009102514 A1 20090423 - HSU LU-YUEH [TW]
- WO 2007080163 A2 20070719 - CONTINENTAL TEVES AG & CO OHG [DE], et al

Designated contracting state (EPC)

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DOCDB simple family (application)

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