

Title (en)

METHOD AND DEVICE FOR DETERMINING AND BALANCING THE WORKING POINT OF VALVES IN A HYDRAULIC SYSTEM

Title (de)

VERFAHREN UND VORRICHTUNG ZUR ERMITTLUNG UND ABGLEICH DES ARBEITSPUNKTES VON VENTILEN IN EINEM HYDRAULISCHEN SYSTEM

Title (fr)

PROCÉDÉ ET DISPOSITIF POUR DÉTERMINER ET RÉGLER LE POINT DE FONCTIONNEMENT DYNAMIQUE DE SOUPAPES DANS UN SYSTÈME HYDRAULIQUE

Publication

**EP 2303654 A1 20110406 (DE)**

Application

**EP 09780017 A 20090630**

Priority

- EP 2009058163 W 20090630
- DE 102008040534 A 20080718

Abstract (en)

[origin: WO2010006919A1] The present invention relates to a method and a device for determining the working point of switching valves of a hydraulic system of a vehicle, in particular of a hydraulic braking circuit, wherein the hydraulic system comprises at least pressure generating means (101, 108), a high pressure switching valve (105), a switching valve (106) and a pre-pressure sensor (104), wherein a pre-pressure  $p_{vor}$  is built up that is higher than a target pressure of the switching valve; the switching valve is subjected to a target flow corresponding to the target pressure; the pre-pressure  $p_{vor}$  is reduced until the switching valve closes; when the switching valve is closed, a nominal target pressure  $p_{vor\_nominal}$  is built up as pre-pressure; after the switching valve is opened, a pressure difference  $\Delta p$  between pre-pressure  $p_{vor\_nominal}$  and a circuit pressure  $p_{kreis}$  is detected; and the working point is determined based on the pressure difference  $\Delta p$ .

IPC 8 full level

**B60T 8/36** (2006.01); **B60T 8/48** (2006.01)

CPC (source: EP KR US)

**B60T 8/36** (2013.01 - EP KR US); **B60T 8/3655** (2013.01 - EP US); **B60T 8/48** (2013.01 - KR); **B60T 8/4872** (2013.01 - EP US); **B60T 13/68** (2013.01 - KR); **Y10T 137/0379** (2015.04 - EP US); **Y10T 137/7758** (2015.04 - EP US)

Citation (search report)

See references of WO 2010006919A1

Designated contracting state (EPC)

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 SE SI SK TR

Designated extension state (EPC)

AL BA RS

DOCDB simple family (publication)

**DE 102008040534 A1 20100121**; **DE 102008040534 B4 20210107**; EP 2303654 A1 20110406; KR 20110040842 A 20110420; US 2011153177 A1 20110623; WO 2010006919 A1 20100121

DOCDB simple family (application)

**DE 102008040534 A 20080718**; EP 09780017 A 20090630; EP 2009058163 W 20090630; KR 20117001137 A 20090630; US 200913054365 A 20090630