

Title (en)

METHOD AND DEVICE FOR ACTIVELY SUPPRESSING PRESSURE OSCILLATIONS IN A HYDRAULIC SYSTEM

Title (de)

VERFAHREN UND VORRICHTUNG ZUR AKTIVEN UNTERDRÜCKUNG VON DRUCKSCHWINGUNGEN IN EINEM HYDRAULIKSYSTEM

Title (fr)

PROCÉDÉ ET DISPOSITIF POUR SUPPRIMER ACTIVEMENT LES FLUCTUATIONS DE PRESSION DANS UN SYSTÈME HYDRAULIQUE

Publication

EP 2352603 A2 20110810 (DE)

Application

EP 09793492 A 20091130

Priority

- EP 2009066014 W 20091130
- AT 18972008 A 20081205

Abstract (en)

[origin: AT507088A4] The method involves detecting a pressure signal (2) by a pressure sensor (1) in a hydraulic system. Alternating component of the pressure signal is determined, and a variable (6) that changes over time is determined by a controller (4) with respect to a nominal value and the alternating component. Piezoelectric actuator (9') is subjected to the variable such that volume of the actuator is changed corresponding to the variable, where the actuator is connected with the hydraulic system. High-or low pass filtering process is carried out by the alternating current component. An independent claim is also included for a device for actively suppressing pressure oscillations or pressure pulsations in a hydraulic system of a cold- or warm-roller or a strip conditioner for iron, steel or aluminum materials, comprising a controlling unit.

IPC 8 full level

B21B 37/00 (2006.01)

CPC (source: EP KR US)

B21B 37/00 (2013.01 - KR); **F15B 21/008** (2013.01 - EP US); **F16L 55/05** (2013.01 - EP US); **B21B 37/62** (2013.01 - EP US);
F15B 2211/6313 (2013.01 - EP US); **F15B 2211/8613** (2013.01 - EP US); **Y10T 137/0379** (2015.04 - EP US)

Citation (search report)

See references of WO 2010063661A2

Cited by

CN102506031A

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 SM TR

DOCDB simple family (publication)

AT 507088 A4 20100215; AT 507088 B1 20100215; BR PI0922297 A2 20160105; CA 2745800 A1 20100610; CN 102256716 A 20111123;
CN 102256716 B 20131106; EP 2352603 A2 20110810; JP 2012510899 A 20120517; KR 20110097927 A 20110831;
MX 2011005637 A 20110624; RU 2011127443 A 20130110; RU 2526647 C2 20140827; US 2012000543 A1 20120105;
WO 2010063661 A2 20100610; WO 2010063661 A3 20100729

DOCDB simple family (application)

AT 18972008 A 20081205; BR PI0922297 A 20091130; CA 2745800 A 20091130; CN 200980148651 A 20091130; EP 09793492 A 20091130;
EP 2009066014 W 20091130; JP 2011538974 A 20091130; KR 20117015554 A 20091130; MX 2011005637 A 20091130;
RU 2011127443 A 20091130; US 200913132715 A 20091130