

Title (en)

A CONTROL METHOD FOR ACTUATING A RETURN-TO-DIG MOVEMENT OF AN IMPLEMENT, SUCH AS A BUCKET, IN A WORK VEHICLE, A CORRESPONDING CONTROL SYSTEM AND A WORK VEHICLE COMPRISING SUCH CONTROL SYSTEM

Title (de)

STEUERVERFAHREN ZUM AUSLÖSEN EINER RÜCKKEHRBEWEGUNG ZUM GRABEN EINES ARBEITSGERÄTS WIE EINER SCHAUFEL IN EINEM ARBEITSFAHRZEUG, ENTSPRECHENDES STEUERSYSTEM UND ARBEITSFAHRZEUG MIT EINEM SOLCHEN STEUERSYSTEM

Title (fr)

PROCÉDÉ DE COMMANDE D'ACTIONNEMENT D'UN MOUVEMENT DE RETOUR EN POSITION D'EXCAVATION D'UN OUTIL, TEL QU'UN GODET, DANS UN VÉHICULE DE TRAVAIL, SYSTÈME DE COMMANDE CORRESPONDANT ET VÉHICULE DE TRAVAIL COMPRENANT UN TEL SYSTÈME DE COMMANDE

Publication

[EP 3719217 A1 20201007 \(EN\)](#)

Application

[EP 20168282 A 20200406](#)

Priority

IT 201900005248 A 20190405

Abstract (en)

A control method for actuating a return-to-dig movement of an implement in a work vehicle powered by a motor is disclosed. Actuating the implement occurs by means of a joystick controlled by a user, a movement of the joystick in a predetermined control area according to a preset direction causing the actuation of the implement by an hydraulic actuator. The hydraulic actuator includes an open centre directional solenoid valve whose opening degree is controlled by means of a driving current. The control method comprises determining that a return-to-dig manoeuvre is requested, acquiring a rotational speed of the motor, applying a modulated driving current of the open centre directional solenoid valve, based on a predetermined reference model, indicative of a nominal relation between the driving current of the open centre directional solenoid valve and the rotational speed of the motor, and setting the modulated driving current to zero when a predetermined reference tilt position of the implement is reached.

IPC 8 full level

[E02F 9/20](#) (2006.01); [E02F 3/43](#) (2006.01); [E02F 9/22](#) (2006.01)

CPC (source: EP)

[E02F 3/44](#) (2013.01); [E02F 9/2004](#) (2013.01); [E02F 9/2282](#) (2013.01)

Citation (search report)

- [A] US 2008313935 A1 20081225 - TRIFUNOVIC BORIS [US]
- [A] US 2011150614 A1 20110623 - NICHOLSON CHRISTIAN [US], et al
- [A] WO 2012053197 A1 20120426 - HITACHI CONSTRUCTION MACHINERY [JP], et al

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EP4234817A1; IT202200003371A1; CN113983226A

Designated contracting state (EPC)

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Designated extension state (EPC)

BA ME

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DOCDB simple family (application)

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