

Title (en)

A CONTROL METHOD FOR ACTUATING A MOVEMENT INVERSION OF AT LEAST ONE OF A BOOM AND AN IMPLEMENT IN A WORK VEHICLE, A CORRESPONDING CONTROL SYSTEM AND A WORK VEHICLE COMPRISING SUCH CONTROL SYSTEM

Title (de)

STEUERVERFAHREN ZUM BETÄTIGEN EINER BEWEGUNGSUMKEHR MINDESTENS EINES AUSLEGERES UND EINES ARBEITSGERÄTES IN EINEM ARBEITSFAHRZEUG, ENTSPRECHENDES STEUERSYSTEM UND ARBEITSFAHRZEUG MIT EINEM SOLCHEN STEUERSYSTEM

Title (fr)

PROCÉDÉ DE COMMANDE D'ACTIONNEMENT D'UN MOUVEMENT D'INVERSION D'AU MOINS UNE FLÈCHE ET D'UN OUTIL DANS UN VÉHICULE DE TRAVAIL, SYSTÈME DE COMMANDE CORRESPONDANT ET VÉHICULE DE TRAVAIL COMPRENANT UN TEL SYSTÈME DE COMMANDE

Publication

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Application

EP 20168285 A 20200406

Priority

IT 201900005212 A 20190405

Abstract (en)

[origin: EP3719218A1] A control method for actuating a movement inversion of at least one of a boom and an implement in a work vehicle powered by a motor is disclosed. Actuating the boom and 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 first preset direction causing the actuation of the boom by a first hydraulic actuator and a movement of the joystick in the control area according to a second preset direction causing the actuation of the implement by a second hydraulic actuator. Each hydraulic actuator includes a respective open centre directional solenoid valve whose opening degree is controlled by means of a driving current as a function of the position of the joystick. The control method comprises acquiring a position of the joystick over time as well as a rotational speed of the motor, determining that a direction inversion manoeuvre is requested when a travel of the joystick from a first operating position to a second operating position includes at least one of the first and the second component of the joystick position being reversed with respect to the neutral position; and - when a direction inversion manoeuvre is requested - applying a modified driving current of at least one of the first and the second open centre directional solenoid valve, respectively, based on a predetermined reference model of the modified driving current, indicative of a nominal relation between the rotational speed of the motor and the evolution over time of the driving current of the respective first and second open centre directional solenoid valve.

IPC 8 full level

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