

Title (en)
A CONTROL METHOD OF ACTUATING A MOVEMENT OF AT LEAST ONE OF A BOOM AND AN IMPLEMENT CONNECTED TO THE BOOM IN A WORK VEHICLE, A CORRESPONDING CONTROL SYSTEM AND A WORK VEHICLE COMPRISING SUCH CONTROL SYSTEM

Title (de)
STEUERVERFAHREN ZUM BETÄTIGEN EINER BEWEGUNG MINDESTENS EINES AUSLEGER UND EINES MIT DEM AUSLEGER VERBUNDENEN ARBEITSGERÄTES IN EINEM ARBEITSFAHRZEUG, ENTSPRECHENDES STEUERSYSTEM UND ARBEITSFAHRZEUG MIT EINEM SOLCHEN STEUERSYSTEM

Title (fr)
PROCÉDÉ DE COMMANDE D'ACTIONNEMENT D'UN MOUVEMENT D'AU MOINS UNE FLÈCHE ET D'UN OUTIL CONNECTÉ À LA FLÈCHE DANS UN VÉHICULE DE TRAVAIL, SYSTÈME DE COMMANDE CORRESPONDANT ET VÉHICULE DE TRAVAIL COMPRENANT UN TEL SYSTÈME DE COMMANDE

Publication
EP 3719216 A1 20201007 (EN)

Application
EP 20168276 A 20200406

Priority
IT 201900005178 A 20190405

Abstract (en)
A control method for actuating a soft stop movement of at least one of a boom and an implement connected to the boom in a work vehicle 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 a the position of the joystick. The control method comprises detecting a travel of the joystick from a driving region to a predetermined neutral region, measuring a neutral time in which the joystick position is continuously inside the neutral region, and if the neutral time is greater than a predetermined threshold of time, controlling the driving current so that it reaches zero with a derivative over time reaching with continuity a value which is lower than a predetermined rate threshold value.

IPC 8 full level
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CPC (source: EP)
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Citation (search report)

- [A] US 2019100900 A1 20190404 - FUKUDA YUJI [JP], et al
- [A] JP H05263435 A 19931012
- [A] JP H09247515 A 19970919 - HITACHI CONSTRUCTION MACHINERY
- [A] US 2018119386 A1 20180503 - KOBAYASHI HIROYUKI [JP], et al

Designated contracting state (EPC)
AL 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 RS SE SI SK SM TR

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EP 20168276 A 20200406; IT 201900005178 A 20190405