

Title (en)

AUTOMATIC TILT CORRECTION DEVICE FOR AN EXTENSIBLE TURNTABLE LADDER OR A SIMILAR LIFTING ARM ON A VEHICLE

Publication

EP 0063709 B1 19861230 (FR)

Application

EP 82102765 A 19820401

Priority

FR 8108037 A 19810422

Abstract (en)

[origin: EP0063709A1] 1. A control apparatus for automatic correction of sideways tilt for an orientable vehicle-mounted lifting arm (6, 7, 8, 9, 10), in particular for an extendible orientable ladder, including a turntable (4) which is orientable about an axis (4a) and which comprises a portion (5) which is pivoted about a substantially horizontal axis and displaced about said axis by an actuating means (19) for correcting sideways tilt, controlled by a member (25) providing electrical proportional control, the turntable being subjected to a pivoting actuator (18) with a control action proportional to an electrical signal representing the controlled speed of pivotal movement and comprising an electrical sensor for measuring the angle of pivotal movement (THETA) of the arm, characterised in that it comprises electrical sensors for measuring the slope of the vehicle in two directions which are transverse with respect to each other, associated with a microprocessor having inputs for acquisition of said slope measurements and further comprising stored in memory means a cyclic calculation sequence in respect of the theoretical speed of correction of sideways tilt as determined from the value of the signal representing the speed of pivotal movement and in dependence on the data from said electrical slope-measuring sensors, in order to supply at an output of the microprocessor which is connected to said member (25) for electrical proportional control of the tilt-correcting actuator (19), a signal which is representative of the speed of tilt correction linking said latter in respect of time to the speed of pivotal movement.

IPC 1-7

B66F 11/04; **E06C 5/40**

IPC 8 full level

B66C 23/90 (2006.01); **B66F 11/04** (2006.01); **E06C 5/40** (2006.01)

CPC (source: EP)

B66C 23/905 (2013.01); **B66F 11/046** (2013.01); **E06C 5/40** (2013.01)

Cited by

IT201700084735A1; CN106379851A; EP0753479A3; ITRE20090039A1; DE3807966A1; GB2189456A; EP0220125A1; FR2587320A1; DE10242270A1; DE10242270B4; EP2202194A1; EP0321789A1; ITRE20090040A1; EP0675069A1; GB2287011A; US5731987A; DE3825129A1; FR2935695A1; EP0420625A3; US5160056A; WO2017125198A1; WO0158246A1; US8965637B2; WO9208666A1; WO2019021123A1

Designated contracting state (EPC)

AT BE CH DE GB IT LI NL SE

DOCDB simple family (publication)

EP 0063709 A1 19821103; **EP 0063709 B1 19861230**; AT E24466 T1 19870115; DE 3274842 D1 19870205; ES 510782 A0 19830201; ES 8303733 A1 19830201; FR 2504701 A1 19821029; FR 2504701 B1 19840330; MA 19453 A1 19821231

DOCDB simple family (application)

EP 82102765 A 19820401; AT 82102765 T 19820401; DE 3274842 T 19820401; ES 510782 A 19820325; FR 8108037 A 19810422; MA 19658 A 19820419