

Title (en)

Large manipulator for concrete pumps with a control device with a safety routine, as well as method to monitor the safety of a foldable boom of such a large manipulator

Title (de)

Grossmanipulator für Betonpumpen mit einer Steuereinrichtung mit einer Sicherheitsroutine, sowie Verfahren zur Sicherheitsüberwachung eines Knickmastes eines solchen Grossmanipulators

Title (fr)

Manipulateur de grande taille pour pompe à béton avec dispositif de contrôle muni d'une routine de sécurité, ainsi que procédé de contrôle de la sécurité d'un mât articulé d'un tel manipulateur de grande taille

Publication

EP 1360386 B1 20140702 (DE)

Application

EP 02711798 A 20020111

Priority

- DE 10107107 A 20010214
- EP 0200202 W 20020111

Abstract (en)

[origin: WO02064912A1] The invention relates to a device for monitoring the safety of a bending pole (22) in a large manipulator, whereby the arms (23 - 27) of the mast can be pivoted in relation to each other by means of a drive unit (34 - 38). The relative position of the arms of the mast in relation to the respective adjacent arm of the mast or frame of the mast (21) is measured for adjusting the position thereof. According to the invention, the positioning measuring values (ei) of the arms of the mast are used in order to control the safety of the drive units (34 38) or the actuators thereof (80 84) in relation to a variation of predefined safety values.

IPC 8 full level

B66C 13/40 (2006.01); **E04G 21/04** (2006.01)

CPC (source: EP KR US)

B66C 13/40 (2013.01 - EP US); **E04G 21/04** (2013.01 - EP KR US); **E04G 21/0436** (2013.01 - EP US); **E04G 21/0463** (2013.01 - EP US)

Designated contracting state (EPC)

AT BE CH CY DE DK ES FI FR GB GR IE IT LI LU MC NL PT SE TR

DOCDB simple family (publication)

WO 02064912 A1 20020822; CN 1524150 A 20040825; DE 10107107 A1 20020829; EP 1360386 A1 20031112; EP 1360386 B1 20140702; JP 2004526081 A 20040826; KR 20030096259 A 20031224; US 2004076503 A1 20040422; US 7657355 B2 20100202

DOCDB simple family (application)

EP 0200202 W 20020111; CN 02804331 A 20020111; DE 10107107 A 20010214; EP 02711798 A 20020111; JP 2002564214 A 20020111; KR 20037010639 A 20030813; US 46667103 A 20030721