

Title (en)

POSITION CONTROL OF A MASTHEAD

Title (de)

POSITIONSREGELUNG EINER MASTSPITZE

Title (fr)

CONTRÔLE DE LA POSITION D'UNE POINTE DE MÂT

Publication

EP 3259221 A1 20171227 (DE)

Application

EP 16708951 A 20160219

Priority

- DE 102015102368 A 20150219
- EP 2016053596 W 20160219

Abstract (en)

[origin: WO2016131977A1] The invention relates to a large manipulator, which has a boom arm (10), which can be folded out and which has a turntable (12) that is rotatable about a vertical axis and a plurality of boom segments (14, 16, 18), wherein each boom segment (14, 16, 18) can be pivoted to a limited extent by a drive unit (26, 28, 30) with respect to an adjacent boom segment (14, 16, 18) or the turntable (12) about a horizontal axis of articulation at an articulation joint (20, 22, 24). The problem addressed by the invention is that of developing such a large manipulator in such a way that the dynamics of the system can be sensed metrologically and can be used in respect of control. Overall, a large manipulator for which vertical motion of the boom tip (32) can be reduced should be provided. The problem is solved in that the large manipulator has at least one inertial sensor (34, 36, 38, 40) for measuring the tilt and/or the acceleration of at least one boom segment (14, 16, 18). The invention further relates to a truck-mounted concrete pump.

IPC 8 full level

B66C 13/46 (2006.01); **B66C 13/06** (2006.01); **E04G 21/04** (2006.01)

CPC (source: CN EP US)

B66C 13/066 (2013.01 - CN EP US); **B66C 13/46** (2013.01 - CN EP US); **E04G 21/0463** (2013.01 - US)

Citation (search report)

See references of WO 2016131977A1

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

Designated extension state (EPC)

BA ME

DOCDB simple family (publication)

DE 102015102368 A1 20160825; CN 107406237 A 20171128; CN 107406237 B 20200825; EP 3259221 A1 20171227; EP 3259221 B1 20200212; US 10407282 B2 20190910; US 2018037444 A1 20180208; WO 2016131977 A1 20160825

DOCDB simple family (application)

DE 102015102368 A 20150219; CN 201680018154 A 20160219; EP 16708951 A 20160219; EP 2016053596 W 20160219; US 201615552165 A 20160219