Title (en)

Crane controls with rope force mode

Title (de)

Kransteuerung mit Seilkraftmodus

Title (fr)

Commande de grue avec mode de traction de câble

Publication

EP 2636635 A1 20130911 (DE)

Application

EP 12008264 A 20121211

Priority

DE 102012004914 A 20120309

Abstract (en)

The crane controller has a lifting mechanism (5) for lifting a load suspended on a rope (4), which is operated in cable power mode in which lifting is controlled, so that a target value of the rope force is adjusted. The speed and/or position of winch are controlled, so that the desired value of the cable force is established. The actual value of cable force is determined by comparing actual value and setpoint of cable force. Independent claims are included for the following: (1) a crane control system; (2) a method for controlling a crane; and (3) a software code for controlling a crane.

Abstract (de)

Die vorliegende Erfindung zeigt eine Kransteuerung für einen Kran (1), welcher ein Hubwerk zum Heben einer an einem Seil (4) hängenden Last (3) aufweist, wobei die Kransteuerung einen Seilkraftmodus aufweist, in welchem die Kransteuerung das Hubwerk so ansteuert, dass sich ein Sollwert der Seilkraft einstellt.

IPC 8 full level

B66D 1/52 (2006.01)

CPC (source: EP KR US)

B66C 13/02 (2013.01 - EP US); **B66C 13/04** (2013.01 - EP KR US); **B66C 13/063** (2013.01 - EP US); **B66C 13/18** (2013.01 - KR US); **B66C 23/52** (2013.01 - KR); **B66D 1/525** (2013.01 - EP US)

Citation (applicant)

- DE 102008024513 A1 20091126 - LIEBHERR WERK NENZING [AT]
- DE 102008024513 A1 20091126 - LIEBHERR WERK NENZING [AT]

Citation (search report)

- [X] WO 2005090226 A1 20050929 - SUBSEA 7 BV [NL], et al
- [X] EP 2123588 A1 20091125 - LIEBHERR WERK NENZING [AT]
- [X] WO 0227684 A1 20020404 - OCEANEERING INT INC [US]

Cited by

CN113845033A

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)

EP 2636635 A1 20130911; **EP 2636635 B1 20190313**; CN 103303799 A 20130918; CN 103303799 B 20170426; DE 102012004914 A1 20130912; JP 2013184825 A 20130919; JP 6193590 B2 20170906; KR 102029949 B1 20191008; KR 20130103364 A 20130923; US 2013245816 A1 20130919; US 9120650 B2 20150901

DOCDB simple family (application)

EP 12008264 A 20121211; CN 201310077079 A 20130311; DE 102012004914 A 20120309; JP 2013046502 A 20130308; KR 20130021050 A 20130227; US 201313788851 A 20130307