

Title (en)

METHOD FOR RAISING AND/OR LOWERING A LOAD-HANDLING ELEMENT OF A LIFTING DEVICE, IN PARTICULAR OF A CRANE, AND LIFTING DEVICE THEREFOR

Title (de)

VERFAHREN ZUM HEBEN UND/ODER SENKEN EINES LASTAUFNAHMEMITTELS EINES HEBEZEUGS, INSBESONDERE EINES KRANS, UND HEBEZEUG HIERFÜR

Title (fr)

PROCÉDÉ SERVANT À SOULEVER ET/OU À ABAISSER UN MOYEN DE RÉCEPTION DE CHARGES D'UN ENGIN DE LEVAGE, EN PARTICULIER D'UNE GRUE, ET ENGIN DE LEVAGE ASSOCIÉ

Publication

EP 3661864 A1 20200610 (DE)

Application

EP 18750421 A 20180803

Priority

- DE 102017117662 A 20170803
- EP 2018071159 W 20180803

Abstract (en)

[origin: WO2019025602A1] The invention relates to a method for raising and/or lowering a load-handling element (9) of a lifting device (6), in particular of a crane (1), wherein the lifting device (6) can be operated at least with a first velocity (v1) or with a second velocity (v2) by means of a control unit (15, 15a) in order to raise and/or lower the load-handling element (9), the first velocity (v1) being less than the second velocity (v2). In order to achieve a reduction in impulses during the raising of the load-handling element (9) and in particular an extended service life of the supporting means (8) in a corresponding method, it is proposed that an inclination angle (N) of the load-handling element (9) is determined by means of an inclination sensor (11a) and/or, as a state of the load-handling element (9), it is determined by means of a state sensor (11b) whether the load-handling element (9) is free or occupied, and that an evaluating unit (12) interacts with the control unit (15, 15a) in such a way that, depending on the determined inclination angle (N) and/or the determined state, the evaluation unit (12) prevents or permits operation of the lifting device (6) with the second velocity (v2) by means of the control unit (15, 15a). The invention further relates to a lifting device (6), in particular of a crane (1), which lifting device is designed to carry out such a method.

IPC 8 full level

B66C 13/06 (2006.01); **B66C 1/40** (2006.01); **B66C 13/16** (2006.01); **B66C 13/23** (2006.01); **B66C 13/46** (2006.01); **B66D 1/48** (2006.01)

CPC (source: EP US)

B66C 13/063 (2013.01 - EP US); **B66C 13/16** (2013.01 - US); **B66C 13/46** (2013.01 - EP); **B66C 17/00** (2013.01 - US)

Citation (search report)

See references of WO 2019025602A1

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)

WO 2019025602 A1 20190207; CN 111108058 A 20200505; CN 207418145 U 20180529; DE 102017117662 A1 20190207;
EP 3661864 A1 20200610; US 2020361751 A1 20201119

DOCDB simple family (application)

EP 2018071159 W 20180803; CN 201721206670 U 20170919; CN 201880050232 A 20180803; DE 102017117662 A 20170803;
EP 18750421 A 20180803; US 201816636016 A 20180803