

Title (en)  
ROTATING TOWER CRANE

Title (de)  
TURMDREHKRAN

Title (fr)  
GRUE PIVOTANTE SUR PYLÔNE

Publication  
**EP 2931649 B1 20180516 (DE)**

Application  
**EP 13810895 A 20131216**

Priority  
• DE 202012012116 U 20121217  
• EP 2013003798 W 20131216

Abstract (en)  
[origin: WO2014095028A1] The invention relates to a crane, in particular a rotating tower crane, comprising a crane cantilever, which can be rotated about an upright axis and on which a trolley is movably arranged, from which a hoisting cable connected to a load hook unwinds, and a load-hook position determining device for determining the load-hook position. The load-hook position can be determined optically by means of only one camera, which is attached to the trolley of the crane and views downward toward the load hook from the trolley in a predetermined and thus known viewing direction. The position of the load hook in the camera image is determined by an image evaluating unit. In order to simplify the finding of the load hook in the camera image, the image evaluating unit can comprise cable-course determining means for determining the cable course of the hoisting cable that unwinds from the trolley, wherein the connection point of two lines that intersect at an acute angle or conically and specify the hoisting cable course can be assumed as the load-hook position at least approximately.

IPC 8 full level  
**B66C 13/16** (2006.01); **B66C 13/18** (2006.01); **B66C 13/46** (2006.01); **B66C 23/02** (2006.01)

CPC (source: CN EP RU US)  
**B66C 13/16** (2013.01 - US); **B66C 13/18** (2013.01 - US); **B66C 13/46** (2013.01 - CN EP RU US); **B66C 23/022** (2013.01 - US)

Cited by  
DE102022103283A1; WO2023151967A1; DE102021130785A1; WO2023094516A1; DE202019102393U1; WO2020182592A1; US11932517B2

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

DOCDB simple family (publication)  
**DE 202012012116 U1 20140319**; CN 104854017 A 20150819; CN 104854017 B 20180123; EP 2931649 A1 20151021; EP 2931649 B1 20180516; EP 3354616 A1 20180801; EP 3354616 B1 20190403; ES 2683294 T3 20180926; ES 2732760 T3 20191125; RU 2015129017 A 20170123; RU 2623287 C2 20170623; TR 201908731 T4 20190722; US 2015329333 A1 20151119; US 9738493 B2 20170822; WO 2014095028 A1 20140626

DOCDB simple family (application)  
**DE 202012012116 U 20121217**; CN 201380065743 A 20131216; EP 13810895 A 20131216; EP 18163759 A 20131216; EP 2013003798 W 20131216; ES 13810895 T 20131216; ES 18163759 T 20131216; RU 2015129017 A 20131216; TR 201908731 T 20131216; US 201314652675 A 20131216