

Title (en)

System for determining the load mass of a load suspended on a lifting rope of a crane

Title (de)

System zum Erfassen der Lastmasse einer an einem Hubseil eines Kranes hängenden Last

Title (fr)

Système de détection de la masse de charge d'une charge suspendue à une corde de levage de grue

Publication

**EP 2298687 A3 20130821 (DE)**

Application

**EP 10009567 A 20100914**

Priority

DE 102009041662 A 20090916

Abstract (en)

[origin: EP2298687A2] The system has a measurement arrangement for measuring a cable weight (22) in a hoist cable, and a calculation unit (26) for indirectly determining the exact load mass (24) based on the cable force. The calculation unit comprises a compensation unit describing influence of the indirect determination of the load mass via the cable force in a model and partly compensates the influence. The compensation unit works on the basis of data on a position and/or movement of a hoisting gear, boom and/or of a tower of the crane. An independent claim is also included for a method for determining a load mass of a load carried by a hoist cable.

IPC 8 full level

**B66C 13/16** (2006.01)

CPC (source: EP KR US)

**B66C 13/04** (2013.01 - KR); **B66C 13/16** (2013.01 - EP KR US); **B66C 13/18** (2013.01 - KR); **B66C 13/22** (2013.01 - KR); **B66C 13/40** (2013.01 - KR)

Citation (search report)

- [X] DD 222577 A1 19850522 - SEEFART INGHOSCHULE [DD]
- [X] US 2002144968 A1 20021010 - RUDDY THOMAS A [US]
- [XI] EP 1602617 A1 20051207 - DEMAG CRANES & COMPONENTS GMBH [DE]
- [X] DE 19512103 A1 19961010 - ROTZLER GMBH CO [DE]

Cited by

US10611606B2; WO2016009040A1

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 SE SI SK SM TR

Designated extension state (EPC)

BA ME RS

DOCDB simple family (publication)

**EP 2298687 A2 20110323; EP 2298687 A3 20130821; EP 2298687 B1 20161130**; AU 2010219433 A1 20110331; AU 2010219433 B2 20150709; BR PI1010334 A2 20121218; CA 2714913 A1 20110316; CA 2714913 C 20171024; CN 102020199 A 20110420; CN 102020199 B 20150805; DE 102009041662 A1 20110324; ES 2617505 T3 20170619; JP 2011079674 A 20110421; JP 5933915 B2 20160615; KR 20110030398 A 20110323; RU 2010138232 A 20120320; RU 2537728 C2 20150110; US 2011066394 A1 20110317; US 8949058 B2 20150203

DOCDB simple family (application)

**EP 10009567 A 20100914**; AU 2010219433 A 20100914; BR PI1010334 A 20100916; CA 2714913 A 20100914; CN 201010289055 A 20100916; DE 102009041662 A 20090916; ES 10009567 T 20100914; JP 2010208470 A 20100916; KR 20100091020 A 20100916; RU 2010138232 A 20100915; US 88296010 A 20100915