

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 B1 20161130 (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)

Cited by

US10611606B2; WO2016009040A1

Designated contracting state (EPC)

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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

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