

Title (en)

Device for loading and/or unloading a cargo hold or storage space and method for loading and/or unloading a cargo hold or storage space

Title (de)

Vorrichtung zum Be- und/oder Entladen eines Laderaumes bzw. Lagerraumes bzw. Verfahren zum Be- und/oder Entladen eines Laderaumes bzw. Lagerraumes

Title (fr)

Dispositif de chargement et/ou déchargement d'une soute ou d'un espace de stockage et procédé de chargement et/ou déchargement d'une soute ou d'un espace de stockage

Publication

EP 1958915 A3 20120815 (DE)

Application

EP 08006281 A 20060210

Priority

- EP 06706858 A 20060210
- DE 202005002315 U 20050211

Abstract (en)

[origin: DE202005002315U1] A bulk grain cargo is loaded or unload to/from a ship by a mechanical grab (5) and hoist suspended from an overhead gantry crane. The grab is linked to a control system. The position of the bucket grab is continually monitored by a sensor to detect pendulum motion.

IPC 8 full level

B66C 13/06 (2006.01); **B66C 13/46** (2006.01)

CPC (source: EP)

B66C 13/063 (2013.01); **B66C 13/46** (2013.01)

Citation (search report)

- [YP] DE 202005002315 U1 20050616 - ISAM AG [DE]
- [A] DE 19756875 A1 19990701 - SIEMENS AG [DE]
- [A] DE 19947739 A1 20010412 - FROELICH KARIN [DE]
- [A] FR 2704847 A1 19941110 - BERTIN & CIE [FR]
- [A] DE 10064182 A1 20020508 - LIEBHERR WERK NENZING [AT]
- [A] US 6126023 A 20001003 - DURRANT-WHYTE HUGH [AU], et al
- [A] US 5392935 A 19950228 - KAZAMA KEIZO [JP], et al
- [AP] US 2005103738 A1 20050519 - RECKTENWALD ALOIS [DE], et al
- [A] DE 4238795 A1 19930701 - HINUEBER EDGAR VON DIPL ING [DE]
- [XY] LOUDA M A ET AL: "INS-based identification of quay-crane spreader yaw", ROBOTICS AND AUTOMATION, 1998. PROCEEDINGS. 1998 IEEE INTERNATIONAL CONFERENCE ON LEUVEN, BELGIUM 16-20 MAY 1998, NEW YORK, NY, USA, IEEE, US, vol. 4, 16 May 1998 (1998-05-16), pages 3310 - 3315, XP010281361, ISBN: 978-0-7803-4300-9

Cited by

CN103499322A; CN103407883A; DE102018005068A1; US11987476B2; WO2012174755A1

Designated contracting state (EPC)

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DOCDB simple family (publication)

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DOCDB simple family (application)

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