

Title (en)

CRANE WITH ANTI-COLLISION DEVICE AND METHOD FOR OPERATING MULTIPLE SUCH CRANES

Title (de)

KRAN MIT ANTI-KOLLISIONS-EINRICHTUNG SOWIE VERFAHREN ZUM BETREIBEN MEHRERER SOLCHER KRANE

Title (fr)

GRUE MUNI D'UN DISPOSITIF ANTI-COLLISION ET PROCÉDÉ POUR FAIRE FONCTIONNER PLUSIEURS GRUES DE CE TYPE

Publication

EP 3713867 B1 20230726 (DE)

Application

EP 19700636 A 20190104

Priority

- DE 102018100133 A 20180104
- EP 2019050155 W 20190104

Abstract (en)

[origin: WO2019134966A1] The invention relates to a method for operating multiple cranes (1, 2), the movements of which are monitored for imminent collisions by anti-collision devices of the cranes, and to cranes comprising at least one movement device for moving a crane element, a control unit (13) for actuating the movement device, and an anti-collision device (17, 18) for monitoring the crane movements of the crane element for possible collisions with another crane. According to the invention, in the event of an imminent collision between a first crane (1) being operated and a second crane (2) which is not being operated, the first crane is stopped; a remote control connection (21) is established from the first crane to the second crane; the second crane is moved out of the collision region (130), which is interfering with an intended movement of the first crane, by means of control commands, which are provided at the first stopped crane and transmitted to the second crane by the remote control connection; the second crane is stopped after being moved out of the collision region by remote control; and the first crane is started up again so that the first crane can carry out its task.

IPC 8 full level

B66C 15/04 (2006.01); **G08G 7/02** (2006.01)

CPC (source: EP US)

B66C 13/40 (2013.01 - US); **B66C 15/045** (2013.01 - EP US); **B66C 23/88** (2013.01 - US)

Citation (examination)

DE 102006040782 A1 20080320 - LIEBHERR WERK NENZING [AT]

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 102018100133 A1 20190704; BR 112020013525 A2 20201201; CN 111712458 A 20200925; CN 111712458 B 20221028; EP 3713867 A1 20200930; EP 3713867 B1 20230726; ES 2960799 T3 20240306; RU 2020125401 A 20220204; RU 2020125401 A3 20220418; US 11286137 B2 20220329; US 2020399098 A1 20201224; WO 2019134966 A1 20190711

DOCDB simple family (application)

DE 102018100133 A 20180104; BR 112020013525 A 20190104; CN 201980012911 A 20190104; EP 19700636 A 20190104; EP 2019050155 W 20190104; ES 19700636 T 20190104; RU 2020125401 A 20190104; US 202016919742 A 20200702