

Title (en)

CONTAINER-LOADING SYSTEM AND METHOD FOR MONITORING OPERATION THEREIN

Title (de)

CONTAINER-VERLADEANLAGE UND VERFAHREN ZUR BETRIEBSÜBERWACHUNG DARIN

Title (fr)

SYSTÈME DE CHARGEMENT DE CONTENEURS ET PROCÉDÉ DE SURVEILLANCE DU FONCTIONNEMENT DANS CE DERNIER

Publication

EP 3894349 B1 20240103 (DE)

Application

EP 20718553 A 20200302

Priority

EP 2020000054 W 20200302

Abstract (en)

[origin: WO2021175403A1] The invention relates to a container-loading system and to a method for monitoring the operation of a working area (3) on the ground (2) underneath a container crane (1), in which one or more 3D laser scanners (10) scan the working area (3) from above. During operation of the system, the laser scanners (10) scan the working area (3) with a fan of divergent planes of light beams or a fan of divergent individual light beams simultaneously in order to obtain a cloud of measurement points, wherein the planes or lines at the level of the working area (3) have a distance from one another which is such that a person standing on the working area is struck by at least one plane of light beams or at least one of the individual light beams (S1). In the cloud of measurement points thus obtained, the working area (3) is identified first (S2). Then it is determined whether there is in the cloud of measurement points at least one or more measurement points typical of a person standing on the identified working area (S3). If there is such a measurement point, the crane movement is slowed or stopped (S4).

IPC 8 full level

B66C 13/46 (2006.01); **B66C 19/00** (2006.01)

CPC (source: EP)

B66C 13/46 (2013.01); **B66C 19/002** (2013.01); **B66C 19/007** (2013.01)

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)

WO 2021175403 A1 20210910; CN 115003617 A 20220902; EP 3894349 A1 20211020; EP 3894349 B1 20240103; EP 3894349 C0 20240103

DOCDB simple family (application)

EP 2020000054 W 20200302; CN 202080006490 A 20200302; EP 20718553 A 20200302