

Title (en)

Apparatus for avoiding collision when lowering container

Title (de)

Kollisionsvermeidungsvorrichtung bei der Absenkung eines Containers

Title (fr)

Dispositif anti-collision pendant la descente d'un conteneur

Publication

**EP 1695936 A1 20060830 (EN)**

Application

**EP 06003034 A 20060215**

Priority

JP 2005051669 A 20050225

Abstract (en)

An obstacle (15) in the vicinity of a line extending from a side face of the container is detected by a first infrared-beam sensor (11), and an obstacle located farther towards the outside than the line extending from the side face of the container is detected by a second infrared-beam sensor (12). Accordingly, when lowering the container, which is gripped by a load block (45), it is possible to prevent the lower end of the container from colliding with the obstacle (15), and in addition, it is possible to detect an obstacle substantially directly underneath, even when the load block (45) and so on is suspended at an angle by wires.

IPC 8 full level

**B66C 13/46** (2006.01)

CPC (source: EP KR)

**B66C 13/085** (2013.01 - EP); **B66C 13/46** (2013.01 - EP); **G09G 3/3648** (2013.01 - KR); **G09G 3/3677** (2013.01 - KR);  
**G09G 2300/0842** (2013.01 - KR)

Citation (applicant)

- JP H10167663 A 19980623 - MITSUBISHI HEAVY IND LTD
- US 4172685 A 19791030 - KAWASAKI HIROSHI [JP], et al
- DE 19519741 A1 19961205 - SIEMENS AG [DE]

Citation (search report)

- [X] US 4172685 A 19791030 - KAWASAKI HIROSHI [JP], et al
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- [A] US 6648156 B1 20031118 - BRYFORS UNO [SE], et al
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KR 20060094865 A 20060830; TW 200630292 A 20060901; TW I269775 B 20070101

DOCDB simple family (application)

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