

Title (en)

Lifting device and method for lifting products

Title (de)

Hebevorrichtung und Verfahren zum Heben von Lasten

Title (fr)

Dispositif et procédé de levage pour soulever des charges

Publication

EP 2636631 A1 20130911 (EN)

Application

EP 13157802 A 20130305

Priority

FI 20125247 A 20120308

Abstract (en)

A lifting device (1), which has support means (20) for supporting one or more products (50) for lifting them, which support means (20) comprise at least two support bars (21 a, 21 b). The lifting device additionally comprises means (10, 12, 15) for adjusting the common centre of gravity of the support means (20) and of the product (50) in a first direction, which means comprise a balancing unit (10), which has a frame part (11) and a lifting part (12) arranged to be moveable in relation to the frame part (11) by means of a transfer mechanism (15). Additionally at least one support bar (21 a, 21 b) is arranged to be moveable in order to adjust the common centre of gravity of the support means (20) and of the product (50) in a second direction, by changing the distance between at least two support bars (21 a, 21 b).

IPC 8 full level

B66C 1/24 (2006.01); **B66C 13/08** (2006.01)

CPC (source: EP FI)

B66C 1/22 (2013.01 - FI); **B66C 1/24** (2013.01 - EP); **B66C 13/08** (2013.01 - EP); **B66F 9/147** (2013.01 - FI)

Citation (search report)

- [XY] EP 0186309 A2 19860702 - KONGO KK [JP]
- [X] JP H06286994 A 19941011 - KOMATSU FORKLIFT
- [Y] JP H08108987 A 19960430 - AICHI CORP KK, et al
- [Y] DE 10057249 A1 20020529 - HORSTMANN MASCHB GMBH [DE]
- [A] JP S6134579 U 19860303
- [A] US 3908695 A 19750930 - DUNBAR GLENN G
- [A] JP H031190 U 19910108
- [X] JP H06321483 A 19941122 - ASAHI TEC CORP
- [A] JP H0740673 U 19950721

Cited by

CN103663093A; GB2620429A; CN110356958A; US2017008739A1; CN113955621A

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