Title (en)

Device for the stepwise raising of heavy weights for tower cranes or working platforms.

Title (de

Klettereinrichtung zum Klettern grosser Klettergewichte bei Turmdrehkranen, Arbeitsbühnen o.dgl.

Title (fr)

Dispositif pour soulever par étapes des charges lourdes pour grues pivotantes sur pylone ou plateformes de travail.

Publication

EP 0516938 B1 19940907 (DE)

Application

EP 92105834 A 19920403

Priority

- DE 4118299 A 19910604
- DE 4135961 A 19911031

Abstract (en)

[origin: EP0516938A1] The invention relates to a device for the stepwise raising of heavy weights for tower cranes, working platforms or the like, preferably a raising device for inserting and removing tower sections into or from towers of tower cranes, working platforms or the like, consisting of a raising frame (10) which can be attached to the part to be lifted or lowered, for example a crane upper part, a platform base or a tower section (1), forms a guide piece, encloses the tower and has an at least partly open push-in side, a hydraulic press, which is linked to a cross-member of the bracing and whose piston rod carries a press shoe with a raising cross-piece which can be supported on the corner posts of a tower section, and a support which is linked to the cross-member and has a supporting cross-piece, which can be supported on corner posts, and an end supporting shoe. Two raising devices arranged in tandem are provided which are fitted in a guide piece surrounding the tower. In addition, provision is made for two hydraulic presses with press shoes (30, 31) and raising cross-pieces (32, 33) to be linked to two cross-members, at a distance from one another, of the raising frame (10), and for two supports, which can be supported on different cross-members of the raising bracing of the tower section or tower sections, to be provided with supporting cross-pieces, the supporting shoes of which are provided with a balancing device which uniformly distributes the supporting forces over both supporting shoes. <IMAGE>

IPC 1-7

B66C 23/32

IPC 8 full level

B66B 7/00 (2006.01); B66B 9/187 (2006.01); B66C 23/28 (2006.01); B66C 23/32 (2006.01)

CPC (source: EP)

B66C 23/283 (2013.01)

Citation (examination)

- SOVIET INVENTIONS ILLUSTRATED Section PQ, Week D08, 1. April 1981 Derwent Publications Ltd., London GB, & SU-A-700 (Stroimash Cons Bur) 17, Juni 1980.
- Prospekt der Firma Liebherr (Deutschland): "Die grossen HC-Krane", LBC-0181-A-01/90-2.d

Cited by

CN103723638A; CN102795556A; CN111691688A; CN102616676A; CN105271014A; CN102602833A; CN106542444A; CN105460801A; CN108439266A; EP2620405A4; CN104045010A; CN102923574A; CN107055367A; CN110733988A; CN103964300A; CN104755370A; DE102016011179A1; CN105480876A; US2021316971A1; US11807503B2; WO2014019852A1; WO2014048516A1; US10934140B2

Designated contracting state (EPC)

DE FR IT NL

DOCDB simple family (publication)

EP 0516938 A1 19921209; EP 0516938 B1 19940907; DE 4135961 A1 19921210; DE 59200457 D1 19941013; JP H05178566 A 19930720

DOCDB simple family (application)

EP 92105834 A 19920403; DE 4135961 A 19911031; DE 59200457 T 19920403; JP 14429892 A 19920604