

Title (en)

A climbing head for hoisting a self-climbing protection system for construction works in buildings

Title (de)

Kletterkopf zum Hochziehen eines selbstkletternden Schutzsystems für Bauarbeiten in Gebäuden

Title (fr)

Tête d'escalade pour lever un système de protection d'escalade pour les travaux de construction de bâtiments

Publication

EP 2518239 A1 20121031 (EN)

Application

EP 11382122 A 20110428

Priority

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Abstract (en)

A climbing head being releasably fastenable to a mast (1) with longitudinal rear lateral flanges (1c) and support elements (2, 2a) at different heights; and comprising two vertical side plates (3a), hinging means (3e) for tiltably coupling the side plates (3a) to a hoist cylinder (4) which is also coupled to anchoring means (5,6) fastened to a floor slab (7) of a building, a rocker member (9) pivotal between a hoist position where its front portion (9a) protrudes from the side plates (3a) and engages the mast (1) when the hoist cylinder (4) extends towards said extended position for hoisting the mast (1), and a passing position, in which it allows the passage of the mast (1) when the hoist cylinder (4) retracts, a lower and an upper claw (10, 11), locking means to lock each of the claws (10, 11) in a locked position where it embraces said lateral flanges (1c) and an open position in which the claw (10, 11) releases said flanges (1c); each claw (10, 11) comprises two claw members, each comprising a fixed claw portion (10a, 10c, 11a, 11c) and movable claw portion (10b, 10d, 11 b, 11d) that is pivotal about a vertical rotation axis (12a, 12b), provided in the fixed claw portion (10a, 10c, 11a, 11c), between said locked and said open position, in vertically aligned first throughholes (17a, 17b; 18a, 18b; 19a, 19b; 20a, 20b) in the fixed (10a, 10c, 11 a, 11c) and in the movable claw portion (10b, 10d, 11 b, 11 d) and a second throughhole (21 a, 21 b; 21 c, 21 d) in the movable claw portion (10b, 10d, 11 b, 11 d); the locking means comprise each a vertical bolt (13a, 13b; 15a, 15b) which, in the claws' (10, 11) locked position, remains inserted in said first throughholes (17a, 17b; 18a, 18b; 19a, 19b; 20a, 20b), whereby left vertical bolts (13a, 13b) are connected to a left vertical rod (14) that extends slidably through the left movable claw portions (10a, 10b), the right vertical bolts (15a, 15b) are connected to a right vertical rod (16) that extends slidably through the right movable claw portions (10d, 11d); the vertical rods (14, 16) each having a length such that their lower end portions (14a, 16a) remain guided in the respective second throughholes (21 a, 21 c) in the lower movable claw portions (10b, 10d) when said vertical bolts (13a, 13b, 15a, 15b) are pulled upwards out of said first throughholes (17a, 17b; 18a, 18b; 19a, 19b; 20a, 20b).

IPC 8 full level

E04G 21/32 (2006.01)

CPC (source: EP)

E04G 21/3223 (2013.01); **E04G 21/3247** (2013.01)

Citation (applicant)

- EP 1899548 A1 20080319 - PERI GMBH [DE]
- EP 1899549 A1 20080319 - PERI GMBH [DE]
- EP 1902185 A1 20080326 - PERI GMBH [DE]

Citation (search report)

- [A] WO 2007036300 A1 20070405 - DOKA IND GMGH [AT], et al
- [A] WO 2008126999 A1 20081023 - KUMKANG INDUSTRY CO LTD [KR], et al

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AU2014224104B2; CN109132786A; EP3715548A1; WO2019002654A1; US11655640B2

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