

Title (en)
TURNBUCKLE DEVICE

Title (de)
SPANNSCHLOSSVORRICHTUNG

Title (fr)
DISPOSITIF DE SERRAGE

Publication
EP 1214487 B1 20050615 (DE)

Application
EP 00965778 A 20000818

Priority
• DE 0002813 W 20000818
• DE 19945596 A 19990923

Abstract (en)
[origin: US6767154B1] A turnbuckle device (10) for clamping concrete shell elements (35, 36) comprises stationary claws (14, 15) and pivotable claws (24, 25) which can be clamped with the stationary claws (14, 15) via a wedge (28) on two neighboring concrete shell elements (35, 36) in that the claws (14, 15, 24, 25) engage in profilings on the frame of the concrete shell elements (35, 36). The stationary claws (14, 15) have archings (18) which engage behind transverse struts (34) or longitudinal struts (33) of a concrete shell element (36). The turnbuckle device (10) is displaceably held on the concrete shell element (36) via the archings (18). If the claws (14, 15, 24, 25) are within the concrete shell element (36), the turnbuckle device (10) can be displaced on the concrete shell element (36) in a longitudinal direction of the transverse strut (34) only that far that the turnbuckle device (10) does not project over an outer edge (39) of the concrete shell element (36). The archings (18) and the position of the claws (14, 15, 24, 25) ensure that the turnbuckle device (10) is also safely fixed on the concrete shell element (36) if it is removed. The wedge (28) is a clamping means for the turnbuckle device (10) and also an opening and closing means for the pivotable claws (24, 25).

IPC 1-7
E04G 17/04

IPC 8 full level
F16B 2/12 (2006.01); **E04G 17/04** (2006.01); **F16B 2/06** (2006.01); **F16B 7/04** (2006.01)

CPC (source: EP KR US)
E04G 17/045 (2013.01 - EP KR US); **E04G 2009/025** (2013.01 - EP US); **Y10T 403/32368** (2015.01 - EP US); **Y10T 403/32401** (2015.01 - EP US); **Y10T 403/32434** (2015.01 - EP US); **Y10T 403/59** (2015.01 - EP US); **Y10T 403/591** (2015.01 - EP US); **Y10T 403/598** (2015.01 - EP US)

Cited by
ES2288325A1; WO2024083777A1

Designated contracting state (EPC)
AT DE ES FR GB IT

DOCDB simple family (publication)
WO 0121910 A1 20010329; AT E298027 T1 20050715; AU 7642400 A 20010424; DE 10047203 A1 20010613; DE 10047203 B4 20040108; DE 10082877 D2 20021010; DE 20080177 U1 20030403; DE 50010573 D1 20050721; EP 1214487 A1 20020619; EP 1214487 B1 20050615; ES 2242639 T3 20051116; JP 2003510527 A 20030318; KR 100730860 B1 20070620; KR 20020047184 A 20020621; US 6767154 B1 20040727

DOCDB simple family (application)
DE 0002813 W 20000818; AT 00965778 T 20000818; AU 7642400 A 20000818; DE 10047203 A 20000923; DE 10082877 T 20000818; DE 20080177 U 20000818; DE 50010573 T 20000818; EP 00965778 A 20000818; ES 00965778 T 20000818; JP 2001525060 A 20000818; KR 20027003829 A 20020323; US 8826702 A 20020313