

Title (en)

GRIPPING DEVICE FOR THE HANDLING OF REINFORCEMENT BASKETS FOR TOWER SEGMENTS OF A WIND TURBINE

Title (de)

GREIFEINRICHTUNG ZUM HANDHABEN VON BEWEHRUNGSKÖRBEN FÜR TURMSEGMENTE EINER WINDENERGIEANLAGE

Title (fr)

DISPOSITIF DE PRÉHENSION POUR LA MANUTENTION DE PANIERS DE RENFORT POUR DES SEGMENTS DE TOUR D'ÉOLIENNE

Publication

EP 2922779 B1 20161214 (DE)

Application

EP 13776499 A 20131014

Priority

- DE 102012221453 A 20121123
- EP 2013071427 W 20131014

Abstract (en)

[origin: CA2889923A1] The invention relates to a gripping apparatus (1) for handling reinforcement cages for tower segments of a wind turbine, having a gripping arm holder (3) and a plurality of gripping arms (5), which are arranged in a star-shaped manner on the gripping arm holder (3). According to the invention in particular a coupling means (13), which can be connected to a reinforcement cage, is arranged on each gripping arm, the gripping arms (5) are length-adjustable in a telescope-like, motorised manner, the gripping apparatus (1) is coupleable to a horizontally and vertically movable lifting apparatus (7) and is designed to receive a reinforcement cage from a device (101) for producing reinforcement cages and/or to place a reinforcement cage in a formwork for producing a tower segment.

IPC 8 full level

B66C 1/10 (2006.01); **B21F 27/12** (2006.01); **B66C 1/42** (2006.01); **F03D 1/00** (2006.01); **F03D 13/00** (2016.01); **F03D 13/20** (2016.01);
F03D 80/00 (2016.01)

CPC (source: CN EP RU US)

B21F 27/12 (2013.01 - CN EP US); **B66C 1/10** (2013.01 - RU); **B66C 1/108** (2013.01 - CN EP US); **B66C 1/42** (2013.01 - EP US);
B66C 1/425 (2013.01 - CN)

Designated contracting state (EPC)

AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

Designated extension state (EPC)

BA ME

DOCDB simple family (publication)

DE 102012221453 A1 20140528; AR 093558 A1 20150610; AU 2013350006 A1 20150521; AU 2013350006 B2 20160107;
BR 112015011799 A2 20170711; CA 2889923 A1 20140530; CA 2889923 C 20170822; CL 2015001379 A1 20151002;
CN 104812691 A 20150729; CN 104812691 B 20170808; DK 2922779 T3 20170313; EP 2922779 A1 20150930; EP 2922779 B1 20161214;
ES 2617908 T3 20170620; ES 2617908 T8 20180713; JP 2015535566 A 20151214; JP 6118420 B2 20170419; KR 101847696 B1 20180410;
KR 20150086531 A 20150728; ME 02591 B 20170620; MX 2015006034 A 20150807; MX 359237 B 20180920; NZ 707676 A 20160226;
PL 2922779 T3 20170531; PT 2922779 T 20170320; RU 2606161 C1 20170110; TW 201437477 A 20141001; TW I537465 B 20160611;
US 10023441 B2 20180717; US 2015314994 A1 20151105; WO 2014079628 A1 20140530; ZA 201502828 B 20160127

DOCDB simple family (application)

DE 102012221453 A 20121123; AR P130104277 A 20131120; AU 2013350006 A 20131014; BR 112015011799 A 20131014;
CA 2889923 A 20131014; CL 2015001379 A 20150520; CN 201380061415 A 20131014; DK 13776499 T 20131014; EP 13776499 A 20131014;
EP 2013071427 W 20131014; ES 13776499 T 20131014; JP 2015543359 A 20131014; KR 20157016322 A 20131014;
ME P2016293 A 20131014; MX 2015006034 A 20131014; NZ 70767613 A 20131014; PL 13776499 T 20131014; PT 13776499 T 20131014;
RU 2015124253 A 20131014; TW 102140159 A 20131105; US 201314646314 A 20131014; ZA 201502828 A 20150424