

Title (en)

WIND TURBINE TOWER MADE OF PREFABRICATED CONCRETE PARTS IN THE SHAPE OF ANNULAR SEGMENTS

Title (de)

TURM FÜR EINE WINDKRAFTANLAGE AUS RINGSEGMENTFÖRMIGEN BETONFERTIGTEILEN

Title (fr)

TOUR POUR ÉOLIENNE CONSTITUÉE D'ÉLÉMENTS PRÉFABRIQUÉS EN BÉTON EN FORME DE SEGMENT ANNULAIRE

Publication

EP 3350391 A2 20180725 (DE)

Application

EP 16758160 A 20160830

Priority

- DE 102015115520 A 20150915
- DE 102016115042 A 20160812
- EP 2016070353 W 20160830

Abstract (en)

[origin: WO2017045907A2] The invention relates to a tower (1) for a wind turbine, having at least one tower portion (3) which is made of concrete and assembled from multiple superposed annular concrete segments (7) such that horizontal joints (6) are formed, wherein every concrete segment (7) is assembled from at least two juxtaposed prefabricated concrete parts (9) in the shape of annular segments such that vertical joints (8) are formed, the prefabricated concreted parts each having an outer side (10), an inner side (16) and one upper, one lower and two lateral contact faces (11, 12, 13). In the vertical direction of the tower (1) the concrete segments (7) of the at least one tower portion (3) are interconnected only by vertical clamping means. The vertical joints (8) of two superposed concrete segments (7) are always arranged offset relative to each in the circumferential direction of the concrete segments (7), with one prefabricated concrete part (9) of an upper concrete segments (7) of the two superposed concrete segments (7) overlapping a vertical joint (8) of a concrete segment (7) situated beneath the upper of the two superposed concrete segments (7). The superposed concrete segments (7) are clamped together by the vertical clamping means, in particular vertical clamping members (18), in such a way that a load-distributing frictional connection is produced.

IPC 8 full level

E04H 12/12 (2006.01); **E04H 12/16** (2006.01); **F03D 13/20** (2016.01)

CPC (source: EP US)

E04H 12/12 (2013.01 - EP US); **E04H 12/16** (2013.01 - EP US); **E04H 12/342** (2013.01 - US); **F03D 13/20** (2016.05 - EP US); **Y02E 10/72** (2013.01 - EP); **Y02E 10/728** (2013.01 - EP US)

Citation (search report)

See references of WO 2017045907A2

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)

WO 2017045907 A2 20170323; **WO 2017045907 A3 20170526**; AU 2016321746 A1 20180412; CA 2998534 A1 20170323; CN 108138510 A 20180608; CN 108138510 B 20210122; DE 102016115042 A1 20170330; EP 3350391 A2 20180725; JP 2018532919 A 20181108; MX 2018003176 A 20180926; RU 2018113170 A 20191016; RU 2018113170 A3 20200212; US 10538936 B2 20200121; US 2018251997 A1 20180906

DOCDB simple family (application)

EP 2016070353 W 20160830; AU 2016321746 A 20160830; CA 2998534 A 20160830; CN 201680053256 A 20160830; DE 102016115042 A 20160812; EP 16758160 A 20160830; JP 2018532513 A 20160830; MX 2018003176 A 20160830; RU 2018113170 A 20160830; US 201615760340 A 20160830