

Title (en)

TALL WIND TURBINE TOWER ERECTION WITH CLIMBING CRANE

Title (de)

ERRICHTUNG EINES GROSSEN WINDTURBINENTURMS MIT KLETTERKRAN

Title (fr)

ÉRECTION DE HAUTE TOUR DE TURBINE ÉOLIENNE AVEC UNE GRUE HISSABLE

Publication

EP 3167186 A4 20180613 (EN)

Application

EP 15819709 A 20150602

Priority

- US 201462023744 P 20140711
- US 201414580471 A 20141223
- US 201514724040 A 20150528
- US 2015033831 W 20150602

Abstract (en)

[origin: CN106662076A] A wind turbine tower comprising a forward leaning rotating tower where the tower rotates on lower and upper bearings. The upper bearing is held in position by a second fixed lower tower that encloses a lower portion of the first rotating tower. A method of constructing a wind turbine tower comprising building a tower in segments; including elements of the tower segments enabling the attachment, support, and movement of a climbing crane. Also included is a lifting cable communicating with a ground based winch vehicle. Climbing crane is positioned on the tower to enable the climbing crane to reach forward of the tower and to raise segments of the tower to build it to full height, and to also raise the nacelle and rotor of the wind turbine.

IPC 8 full level

F03D 9/00 (2016.01); **B66C 23/20** (2006.01); **E04H 12/34** (2006.01); **F03D 13/10** (2016.01); **F03D 13/20** (2016.01)

CPC (source: EP US)

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Citation (search report)

- [X] US 2010301613 A1 20101202 - OOSTERLING PIETER ADRIAAN [NL]
- [A] GB 2466863 A 20100714 - RAWLINGS MATTHEW JAMES HAROLD [GB]
- [A] US 2014115977 A1 20140501 - EGAN FALLON M [US], et al
- [I] FR 2943743 A1 20101001 - VERGNET [FR], et al
- [I] WO 2012159775 A2 20121129 - HEIJMANS OEVERMANN GMBH [DE], et al
- [I] WO 2013171359 A1 20131121 - STRUCTURAL RES S L [ES]
- See references of WO 2016007241A1

Designated contracting state (EPC)

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