

Title (en)

ANNULAR MULTI-ROTOR DOUBLE-WALLED TURBINE

Title (de)

RINGFÖRMIGE DOPPELWANDIGE TURBINE MIT MEHREREN ROTOREN

Title (fr)

TURBINE À DOUBLE PAROI ET À PLUSIEURS ROTORS ANNULAIRES

Publication

**EP 2368033 A1 20110928 (EN)**

Application

**EP 09828483 A 20091112**

Priority

- CA 2009001649 W 20091112
- CA 2645296 A 20081127

Abstract (en)

[origin: WO2010060192A1] An annular single or multi-rotor double-walled turbine. The turbine includes an outer shroud, an inner shroud, and a plurality of driveshafts. The turbine also includes a plurality of rotors coaxially attached to the plurality of driveshafts at spaced intervals. Each of the plurality of rotors comprises a plurality of turbine blades extending between the inner and outer shrouds. Each of the plurality of turbine blades comprises a face. The inner shroud and the outer shroud form a continuous channel for directing a fluid entering the turbine towards the faces of the turbine blades and for directing fluid discharged from a first of the plurality of rotors to the remaining rotors. The channel greatly improves efficiency of power extraction from all augmented and non-augmented fluid streams.

IPC 8 full level

**F03D 1/04** (2006.01); **F01D 1/02** (2006.01); **F01D 9/02** (2006.01); **F03B 3/04** (2006.01); **F03B 3/18** (2006.01); **F03B 17/06** (2006.01); **F03D 1/02** (2006.01); **F03D 3/02** (2006.01); **F03D 3/04** (2006.01)

CPC (source: EP US)

**F03B 17/061** (2013.01 - EP US); **F03D 1/025** (2013.01 - EP); **F03D 1/04** (2013.01 - EP US); **F03D 3/0427** (2013.01 - EP); **F03D 13/20** (2016.05 - US); **F03D 80/00** (2016.05 - US); **F03D 9/25** (2016.05 - US); **F05B 2240/13** (2013.01 - EP US); **F05B 2240/133** (2013.01 - EP US); **Y02E 10/20** (2013.01 - US); **Y02E 10/30** (2013.01 - EP); **Y02E 10/72** (2013.01 - EP US); **Y02E 10/728** (2013.01 - EP); **Y02E 10/74** (2013.01 - EP US)

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Designated extension state (EPC)

AL BA RS

DOCDB simple family (publication)

**CA 2645296 A1 20100527**; CN 102301128 A 20111228; CN 102301128 B 20140702; EP 2368033 A1 20110928; EP 2368033 A4 20140122; US 2012003077 A1 20120105; WO 2010060192 A1 20100603

DOCDB simple family (application)

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