

Title (en)

AXIAL TURBO ENGINE WITH LOW GAP LOSSES

Title (de)

AXIALTURBOMASCHINE MIT GERINGEN SPALTVERLUSTEN

Title (fr)

TURBOMACHINE AXIALE À PERTES PAR JEU RÉDUITES

Publication

**EP 2304187 A1 20110406 (DE)**

Application

**EP 09797510 A 20090716**

Priority

- EP 2009059173 W 20090716
- EP 08012959 A 20080717
- EP 2009058681 W 20090708
- EP 09797510 A 20090716

Abstract (en)

[origin: EP2146053A1] The machine i.e. axial compressor (1), has rotor blades (2) comprising a front edge (8), a radially outer free blade tip (15) and an annular enclosure (13). Rotor blades have a radial projection (18) in a region of the front edge on the blade tip. The annular enclosure has an annular radial recess (17) at an annulus inner side (14). The recess is arranged at a radial distance from enveloping ends of the blade tip such that a gradient of the radial projections on the side facing the radial gap (16) emulates a gradient of the radial recess along a main flow direction of the engine.

IPC 8 full level

**F01D 5/20** (2006.01); **F01D 5/14** (2006.01); **F01D 11/08** (2006.01)

CPC (source: EP US)

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Citation (search report)

See references of WO 2010007137A1

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