

Title (en)

ROTOR WITH SHROUDED BLADES OF A TURBOMACHINE

Title (de)

ROTOR UND LAUFSCHAUFELN MIT DECKBAND EINER STRÖMUNGSMASCHINE

Title (fr)

ROTOR AVEC AUBES MOBILES CARENÉES D'UNE TURBOMACHINE

Publication

EP 2294286 A2 20110316 (DE)

Application

EP 09745441 A 20090430

Priority

- DE 2009000630 W 20090430
- DE 102008023326 A 20080513

Abstract (en)

[origin: WO2009138057A2] The invention relates to a shroud for rotating blades of a turbo machine, in particular a gas turbine. Said shroud (10) is arranged along the circumference of a row of several rotating blades (14, 50) disposed on a rotor (12) and has at least one separation gap (16, 16', 16'') along the circumference. The separation gap (16, 16', 16'') is serrated and has at least three damping gaps (20, 22, 24, 26, 28) that are located at a distance from one another and extend at an angle from the axis of rotation (18) of the rotor (12), and adjacent connection gaps (30, 32, 34, 36, 38, 40) which connect the damping gaps (20, 22, 24, 26, 28) or extend the same in the direction of the shroud edges (46, 48). When the rotor (12) rotates, the width of the damping gaps (20, 22, 24, 26, 28) is reduced to the point where the gap walls (42, 44) forming the damping gaps (20, 22, 24, 26, 28) rest against each other. The invention further relates to a turbo machine, in particular a gas turbine, comprising at least one rotor (12) that has at least one row of several rotating blades (14, 50). A shroud (12) according to the invention is arranged along the circumference of the row of rotating blades.

IPC 8 full level

F01D 5/22 (2006.01)

CPC (source: EP US)

F01D 5/225 (2013.01 - EP US); **F05D 2250/183** (2013.01 - EP US); **F05D 2260/96** (2013.01 - EP US)

Citation (search report)

See references of WO 2009138057A2

Designated contracting state (EPC)

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 SE SI SK TR

Designated extension state (EPC)

AL BA RS

DOCDB simple family (publication)

DE 102008023326 A1 20091119; EP 2294286 A2 20110316; EP 2294286 B1 20190227; ES 2715798 T3 20190606; US 2011103956 A1 20110505; US 8573939 B2 20131105; WO 2009138057 A2 20091119; WO 2009138057 A3 20100826

DOCDB simple family (application)

DE 102008023326 A 20080513; DE 2009000630 W 20090430; EP 09745441 A 20090430; ES 09745441 T 20090430; US 99162709 A 20090430