

Title (en)  
REDUCING THE THERMAL LOAD OF AN EXTERNAL HOUSING FOR A TURBO-MACHINE

Title (de)  
VERMINDERUNG DER THERMISCHEN BELASTUNG EINES AUSSENGEHÄUSES FÜR EINE STRÖMUNGSMASCHINE

Title (fr)  
RÉDUCTION DE LA CHARGE THERMIQUE D'UN BOÎTIER EXTÉRIEUR POUR UNE TURBOMACHINE

Publication  
**EP 2310633 B1 20111228 (DE)**

Application  
**EP 09806401 A 20090625**

Priority  

- EP 2009057942 W 20090625
- EP 08014549 A 20080814
- EP 09806401 A 20090625

Abstract (en)  
[origin: EP2154332A1] The turbo-machine has an inner housing (3) arranged around a rotor (2), and an outer housing (4) arranged around the inner housing. The rotor comprises a medium pressure thrust-compensating piston (6) with a lateral area (7) arranged around the piston. A prechamber (10) is formed between the inner housing and the piston, and a damping line (12) feeds vapor into the prechamber in the inner housing. An annular chamber (17) is arranged at the inner housing, and is connected with an evaporation chamber (11). The annular chamber is arranged opposite to the lateral area.

IPC 8 full level  
**F01D 3/04** (2006.01); **F01D 11/04** (2006.01)

CPC (source: EP)  
**F01D 3/04** (2013.01); **F01D 11/04** (2013.01)

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

DOCDB simple family (publication)  
**EP 2154332 A1 20100217**; AT E539233 T1 20120115; CN 102132008 A 20110720; CN 102132008 B 20140219; EP 2310633 A1 20110420; EP 2310633 B1 20111228; JP 2011530670 A 20111222; JP 5221760 B2 20130626; WO 2010018021 A1 20100218

DOCDB simple family (application)  
**EP 08014549 A 20080814**; AT 09806401 T 20090625; CN 200980131576 A 20090625; EP 09806401 A 20090625; EP 2009057942 W 20090625; JP 2011522448 A 20090625