

Title (en)  
TURBOMACHINE HOUSING

Title (de)  
STRÖMUNGSMASCHINENGEHÄUSE

Title (fr)  
CARTER DE TURBOMACHINE

Publication  
**EP 3445953 B1 20200401 (DE)**

Application  
**EP 16787365 A 20161019**

Priority  
• DE 102016107119 A 20160418  
• EP 2016075002 W 20161019

Abstract (en)  
[origin: WO2017182106A1] The invention relates to a turbomachine housing (21), in particular a steam turbine housing, comprising a first housing part and a second housing part (22) which are connected together via screw connections (28) on opposing or adjacent flanges. The second housing part (22) comprises a curved wall (23) with a curved inner face (24) and a curved outer face (25). The invention is characterized in that the curved inner face (24) is contoured with a first curvature radius (R1) in a first region facing away from the screw connections (28) and with a second curvature radius (R2), which deviates from the first curvature radius (R1), in a second region facing the screw connections (28) such that a force vector (34) of the force which depends on a pressure in the interior of the turbomachine housing (21) runs approximately coaxially but opposite to a force vector (32) of the screwing force of the screw connections (28) in the region of the screw connections (28), said screwing force vector extending through the axis (33) of the screw connections (32).

IPC 8 full level  
**F01D 25/24** (2006.01); **F01D 25/26** (2006.01)

CPC (source: EP)  
**F01D 25/243** (2013.01); **F01D 25/246** (2013.01); **F01D 25/265** (2013.01)

Citation (opposition)  
Opponent : Siemens Energy Global GmbH & Co. KG,  
• US 2278304 A 19420331 - CONRAD JOSEPH D, et al  
• DE 3542073 A1 19870604 - BBC BROWN BOVERI & CIE [CH]  
• EP 2405105 A2 20120111 - GEN ELECTRIC [US]

Designated contracting state (EPC)  
AL 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 RS SE SI SK SM TR

DOCDB simple family (publication)  
**DE 102016107119 A1 20171019**; BR 112018069249 A2 20190122; BR 112018069249 B1 20230214; CN 109154207 A 20190104;  
CN 109154207 B 20210831; EP 3445953 A1 20190227; EP 3445953 B1 20200401; JP 2019513944 A 20190530; JP 6700476 B2 20200527;  
WO 2017182106 A1 20171026

DOCDB simple family (application)  
**DE 102016107119 A 20160418**; BR 112018069249 A 20161019; CN 201680084728 A 20161019; EP 16787365 A 20161019;  
EP 2016075002 W 20161019; JP 2019505115 A 20161019