

Title (en)
TURBOMACHINE WITH MAGNETIC BEARING

Title (de)
TURBOMASCHINE MIT MAGNETLAGERUNG

Title (fr)
TURBOMACHINE AVEC PALIER MAGNÉTIQUE

Publication
EP 3294996 A1 20180321 (DE)

Application
EP 16733470 A 20160628

Priority
• DE 102015218492 A 20150925
• EP 2016064961 W 20160628

Abstract (en)
[origin: WO2017050445A1] The invention relates to a turbomachine (1) comprising a rotor (2) which is supported on at least one shaft end (3) by means of an active magnetic bearing (4). At least one cooling lamella (6) is arranged on the rotor (2) between the rotor (2) region (5) to which a fluid is supplied and the magnetic bearing (4). Both the magnetic bearing (4) as well as the cooling lamella (6) are cooled by air. For cooling purposes, two separate cooling systems (7, 8) are provided, the first cooling system (7) of which provides air for cooling the magnetic bearing (4) and the second cooling system (8) of which provides air for cooling the cooling lamellae (6). The invention further relates to a method for operating such a turbomachine.

IPC 8 full level
F01D 25/16 (2006.01)

CPC (source: EP)
F01D 25/16 (2013.01); **F05D 2240/515** (2013.01)

Citation (search report)
See references of WO 2017050445A1

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

Designated extension state (EPC)
BA ME

DOCDB simple family (publication)
WO 2017050445 A1 20170330; DE 102015218492 A1 20170330; EP 3294996 A1 20180321; EP 3294996 B1 20190417; PL 3294996 T3 20191031

DOCDB simple family (application)
EP 2016064961 W 20160628; DE 102015218492 A 20150925; EP 16733470 A 20160628; PL 16733470 T 20160628