

Title (en)  
TURBOMACHINE WITH MAGNETIC BEARING

Title (de)  
TURBOMASCHINE MIT MAGNETLAGERUNG

Title (fr)  
TURBOMACHINE AVEC PALIER MAGNÉTIQUE

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Application  
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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.

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