

Title (en)
Turbine engine rotor.

Title (de)
Turbomaschinenwelle.

Title (fr)
Rotor de turbomachine.

Publication
EP 0500972 A1 19920902 (DE)

Application
EP 91102744 A 19910225

Priority
EP 91102744 A 19910225

Abstract (en)
Due to the manufacturing process, there are frequently rotationally symmetrical cavities (4) in shafts of turbo engines, and these have a thermally insulating effect. To improve heat transfer in the shaft (1, 2), the cavities are filled with a gas which is a good heat conductor and/or, the front walls of the cavity, have axially/radially extending ribs (11). It is possible in this way to reduce or even eliminate the insulating effect of the cavity. <IMAGE>

Abstract (de)
In Wellen von Turbomaschinen befinden sich vielfach herstellungsbedingte rotationssymmetrische Hohlräume (4), welche thermisch isolierend wirken. Zur Verbesserung des Wärmeüberganges in der Welle (1,2) sind die Hohlräume mit einem gut wärmeleitenden Gas gefüllt und/oder weisen an den Strinwänden des Hohlraums axial-radial verlaufende Rippen (11) auf. Auf diese Weise lässt sich die isolierende Wirkung des Hohlraums abschwächen oder gar aufheben. <IMAGE>

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F01D 5/08; F02C 7/30

IPC 8 full level
F01D 5/08 (2006.01)

CPC (source: EP)
F01D 5/088 (2013.01)

Citation (search report)
• [Y] DE 849327 C 19520915 - BBC BROWN BOVERI & CIE
• [A] CH 322772 A 19570630 - BBC BROWN BOVERI & CIE [DE]
• [Y] PATENT ABSTRACTS OF JAPAN vol. 8, no. 90 (M-292)(1527) 25 April 1984,; & JP-A-59 005 814 (HITACHI) 12 Januar 1984,

Cited by
EP2045442A1; EP1785587A1

Designated contracting state (EPC)
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