

Title (en)
Metallic shroud structure

Title (de)
Gehäusestruktur in Metallbauweise

Title (fr)
Structure de virole métallique

Publication
EP 1149985 A3 20030917 (DE)

Application
EP 01110386 A 20010426

Priority
DE 10020673 A 20000427

Abstract (en)
[origin: EP1149985A2] The metal housing structure for the running blade area of axially through-flowed compressor and turbine stages, particularly in gas turbine drive units, has a circular ring-shaped, closed, mechanically stable outer wall and an inner wall segmented by multiple peripheral expansion seams and at a reduced radial distance from the running blade points. A connecting structure transmitting load at least in a radial direction is provided between the inner and outer wall. As a connecting structure, a hollow chamber structure (10) multiply divided extends at least over the main part of facing surface areas of inner (5) and outer (3) walls and has a number of thin, upright directly cohesive wall components on the inner and outer walls at an angle to each other. The hollow chamber structure is soldered to the inner and/or outer wall.

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IPC 8 full level
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CPC (source: EP US)
F01D 11/122 (2013.01 - EP US)

Citation (search report)
• [Y] DE 1551183 A1 19700416 - GEN ELECTRIC
• [Y] US 3728039 A 19730417 - PLEMMONS L, et al
• [A] US 4666371 A 19870519 - ALDERSON MAX [GB]

Cited by
EP2050931A3; EP2728124A1; GB2362432B; US8092148B2; US11125101B2; US9963993B2; WO2008011864A1; WO2014207054A1; US10760527B2

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