

Title (en)

AXIAL SWIRL CONTROLLER FOR LARGE CAPACITY RADIAL COMPRESSOR

Publication

EP 0439757 B1 19930901 (DE)

Application

EP 90124150 A 19901213

Priority

DE 4002548 A 19900129

Abstract (en)

[origin: EP0439757A1] An axial swirl controller for large-capacity radial compressors has a flow duct, which passes from a first cylindrical section (15) via a spherical section (16) nozzle-shaped into a second cylindrical section (17), which for its part has a circumferential surface which has an incline of between slightly more than 0 DEG and 10 DEG in relation to an axially parallel circumferential surface. The guide vanes (22) supported in the transitional plane from the first cylindrical section (15) to the spherical section (16) have an axis of rotation (23) which divides the guide vane surface in a ratio of 1/3 : 2/3. The ratio of the diameter (D1) of the first cylindrical section (15) to the diameter (D2) at the inlet of the second cylindrical section (17) is between 1.1 and 1.4. The guide vanes (22) are adjusted by means of an adjusting collar (31) mounted on the outside of the casing, which collar acts on the axis of rotation (23) of the guide vanes (22) by way of an articulated lever (25). <IMAGE>

IPC 1-7

F04D 29/46; F04D 29/56

IPC 8 full level

F04D 29/46 (2006.01); **F04D 29/56** (2006.01)

CPC (source: EP US)

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