

Title (en)  
ROTARY MACHINE, PARTICULARLY RADIAL-FLOW COMPRESSOR

Publication  
**EP 0046173 B1 19840411 (DE)**

Application  
**EP 81104713 A 19810619**

Priority  
CH 628180 A 19800820

Abstract (en)  
[origin: EP0046173A1] 1. A centrifugal machine, more particularly a radial compressor having an unbladed diffuser, the unbladed diffuser duct (7) containing, at least in one wall (7a, 7b), a continuous passage (10) or passages distributed over the periphery, the same connecting the diffuser duct (7) to at least one annular chamber disposed behind the diffuser wall (7a, 7b), characterised in that the chamber is in the form of a pressure equalization chamber (9) and its cross-sectional area (A) is so dimensioned that the Helmholtz resonance frequency is at least three times greater than the maximum pulsation frequency, and the passage width (B) is not more than 1% of the diameter (D) of the centrifugal machine impeller.

IPC 1-7  
**F04D 29/44**

IPC 8 full level  
**F01D 17/14** (2006.01); **F04D 27/02** (2006.01); **F04D 29/46** (2006.01)

CPC (source: EP)  
**F01D 17/143** (2013.01); **F04D 29/441** (2013.01); **F04D 29/665** (2013.01); **F04D 27/0246** (2013.01); **F05D 2250/52** (2013.01)

Cited by  
DE4125487C1; US4579509A; EP2090786A3; US6540480B2; US8262351B2

Designated contracting state (EPC)  
DE FR GB IT NL SE

DOCDB simple family (publication)  
**EP 0046173 A1 19820224**; **EP 0046173 B1 19840411**; CH 646757 A5 19841214; DE 3031848 A1 19820304; DE 3163065 D1 19840517; DK 151495 B 19871207; DK 151495 C 19880524; DK 344681 A 19820221; ES 268526 U 19830516; ES 268526 Y 19831201; NO 152381 B 19850610; NO 152381 C 19850918; NO 812804 L 19820222

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