

Title (en)  
Vortex inlet vanes

Title (de)  
Drallerzeugungsleitapparat

Title (fr)  
Générateur de tourbillons dans section d'admission

Publication  
**EP 1416123 B1 20091230 (DE)**

Application  
**EP 03022991 A 20031010**

Priority  
DE 10250302 A 20021029

Abstract (en)  
[origin: EP1416123A2] The compressor assembly, for a turbocharger at an internal combustion motor, has an inserted spin unit (7) fitted into the housing (3) and/or the air intake (6) and in front of the running wheel (5), to generate a spiral flow towards the wheel. The spin unit is inserted at the junction between the housing and the air intake, with a mounting flange (12) to secure it radially within the housing or the air intake, and fix it axially between the air intake and the housing. An elastic seal (8) is between the air intake and/or the spin unit and the housing.

IPC 8 full level  
**F01D 9/04** (2006.01); **F01D 9/06** (2006.01); **F01D 25/24** (2006.01); **F02C 6/12** (2006.01); **F02C 7/00** (2006.01); **F02C 7/04** (2006.01); **F04D 29/42** (2006.01); **F04D 29/44** (2006.01); **F04D 29/46** (2006.01); **F04D 29/62** (2006.01)

CPC (source: EP)  
**F01D 9/02** (2013.01); **F04D 29/4213** (2013.01); **F04D 29/444** (2013.01); **F04D 29/462** (2013.01); **F04D 29/624** (2013.01); **F05D 2220/40** (2013.01); **F05D 2240/127** (2013.01); **F05D 2250/51** (2013.01)

Citation (examination)  
US 6020718 A 20000201 - OZAWA HIDEKIYO [JP], et al

Cited by  
DE102010054478A1; DE102004039299A1; FR2921695A1; CN103758789A; CN114251281A; CN114370433A; CN102269088A; DE102011102838B4; DE102008017121A1; FR2999251A1; FR3048022A1; EP3660325A1; EP2050969A1; DE102005019896A1; DE102005019896B4; GB2500059A; GB2500059B; EP2067958A3; CN102032185A; US2018347584A1; US10760587B2; US8067844B2; US9683758B2; US8156741B2; DE102007062204A1; DE102005045194B4; EP3806292A1; WO2009105598A1; WO2009071174A1; WO2019219268A1; DE102007039120A1; US8651800B2; DE102007039120B4; EP2028374A2; US8286428B2; US8177498B2; US8579585B2; US9850809B2

Designated contracting state (EPC)  
AT DE ES FR GB IT

DOCDB simple family (publication)  
**EP 1416123 A2 20040506; EP 1416123 A3 20080206; EP 1416123 B1 20091230**; AT E453778 T1 20100115; DE 10250302 A1 20040519; DE 10250302 B4 20041209; DE 50312281 D1 20100211; ES 2335875 T3 20100406

DOCDB simple family (application)  
**EP 03022991 A 20031010**; AT 03022991 T 20031010; DE 10250302 A 20021029; DE 50312281 T 20031010; ES 03022991 T 20031010