

Title (en)

Multistage motor-compressor for the compression of a fluid, for motor vehicles for example

Title (de)

Mehrstufiger Motor-Kompressor für die Kompression von Gasen, z. B. für Kraftfahrzeuge

Title (fr)

Compresseur à moteur multi-étages pour compression de fluides, par exemple pour véhicules automobiles

Publication

**EP 1749992 A1 20070207 (EN)**

Application

**EP 06101557 A 20060210**

Priority

IT TO20050558 A 20050805

Abstract (en)

The motor-compressor (5) comprises a first compression stage (6) having a primary impeller (8) and at least one delivery duct (16), a second compression stage (7) having a secondary impeller (21) spinning in a predetermined direction of rotation, and at least one transfer duct (44) placed so as to put the delivery duct (16) in communication with a fluid conveyor (39) for the second stage (7). The transfer duct (44) is shaped in a way to create a fluid flow entering the conveyor (39) with a substantially helical course and a direction of rotation opposite to the direction of rotation of the secondary impeller (21).

IPC 8 full level

**F02B 39/10** (2006.01); **F02B 33/40** (2006.01); **F04D 17/08** (2006.01); **F04D 17/12** (2006.01); **F04D 25/06** (2006.01); **F25B 31/02** (2006.01)

CPC (source: EP)

**F02B 33/40** (2013.01); **F02B 39/10** (2013.01); **F04D 17/12** (2013.01); **F04D 25/06** (2013.01); **F04D 29/4213** (2013.01); **F04D 29/441** (2013.01); **F05D 2250/51** (2013.01); **F05D 2260/14** (2013.01)

Citation (search report)

- [A] US 2004247461 A1 20041209 - PFLUEGER FRANK [DE], et al
- [A] US 3171353 A 19650302 - MCMAHAN KENTON D
- [A] EP 1041289 A2 20001004 - COOPER CAMERON CORP [US]
- [A] US 2004179947 A1 20040916 - AGRAWAL GIRIDHARI L [US], et al
- [A] US 4969803 A 19901113 - TURANSKYJ LUBOMYR [DE]

Cited by

DE102017205704A1; EP2163746A3; EP3112686A4; GB2490563A; GB2490563B; US8388302B2; US10174670B2; WO2018197622A1; JP2010065681A; WO2022029386A1; FR3113303A1; EP2821652B1; WO2019001911A1; WO2022214852A1

Designated contracting state (EPC)

AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IS IT LI LT LU LV MC NL PL PT RO SE SI SK TR

Designated extension state (EPC)

AL BA HR MK YU

DOCDB simple family (publication)

**EP 1749992 A1 20070207**; **EP 1749992 B1 20100210**; AT E457417 T1 20100215; DE 602006012139 D1 20100325; IT TO20050558 A1 20070206

DOCDB simple family (application)

**EP 06101557 A 20060210**; AT 06101557 T 20060210; DE 602006012139 T 20060210; IT TO20050558 A 20050805