

Title (en)

Automotive vane-type vacuum pump

Title (de)

Flügelzellenvakuumpumpe für Automobile

Title (fr)

Pompe à vide à ailettes pour automobiles

Publication

**EP 1193396 B1 20150311 (EN)**

Application

**EP 01107401 A 20010326**

Priority

JP 2000301962 A 20001002

Abstract (en)

[origin: EP1193396A2] An automotive vane-type vacuum pump restrains seizure from taking place between an axial end surface of a rotor and a case, thereby permitting improved durability. The automotive vane-type vacuum pump for forcibly feeding a fluid from an inlet to an outlet includes a bottomed cylindrical case having an inlet and an outlet, a rotor eccentrically accommodated in the case, a shaft that is secured to the rotor, having both ends thereof rotatably supported by both bottom surfaces of the case, and rotates the rotor by an external driving force, and a vane that rotates slidably in contact with the inner peripheral surface of the case while moving in and out of the rotor as the rotor rotates. The axial movement of the shaft is restricted by slidable contact between axial movement restricting stepped portions provided on both ends of the shaft, and the case. Furthermore, a very small gap is formed between an axial end surface of the rotor and the case. <IMAGE>

IPC 8 full level

**F04C 18/344** (2006.01); **F04C 25/02** (2006.01); **F01C 21/08** (2006.01); **F01C 21/10** (2006.01)

CPC (source: EP KR)

**F01C 21/08** (2013.01 - EP); **F01C 21/104** (2013.01 - EP); **F04C 18/344** (2013.01 - KR); **F04C 18/3441** (2013.01 - EP)

Cited by

DE102015216104B3; US9863420B2; WO2012167780A3

Designated contracting state (EPC)

DE FR GB

DOCDB simple family (publication)

**EP 1193396 A2 20020403**; **EP 1193396 A3 20030730**; **EP 1193396 B1 20150311**; JP 2002106486 A 20020410; JP 3672237 B2 20050720; KR 100385682 B1 20030527; KR 20020026790 A 20020412

DOCDB simple family (application)

**EP 01107401 A 20010326**; JP 2000301962 A 20001002; KR 20010021142 A 20010419