

Title (en)

GAS EXCHANGE VALVE ARRANGEMENT AND VALVE SEAT CONSTRUCTION WITH A RING-SHAPED GROOVE

Title (de)

GASWECHSELVENTILANORDNUNG UND VENTILSITZKONSTRUKTION MIT RINGFÖRMIGER NUT

Title (fr)

DISPOSITIF DE SOUPAPE DE COMMUTATION DES GAZ ET CONCEPTION DE SIEGE DE SOUPAPE AVEC RAINURE ANNULAIRE

Publication

EP 1301693 B1 20040609 (DE)

Application

EP 01967166 A 20010713

Priority

- DE 10034773 A 20000718
- EP 0108099 W 20010713

Abstract (en)

[origin: WO0206640A1] The invention relates to a gas exchange valve arrangement for internal combustion engines, especially two-stroke high diesel engines, comprising a valve seat (3) encompassing a stationary associated flow channel (2) and a valve part (4) which can move in relation thereto and which is provided with a valve head (6) which can be placed in a sealing position on the valve seat (3). The inventive gas exchange valve is characterized by a long service life obtained by providing at least one ring-shaped narrow sealing surface (10) in the region of at least one of the mutually dependent conical surfaces (7,8) of the valve seat (3) and the valve head (6), which is defined on at least one side by a ring-shaped material recess (11,11a).

IPC 1-7

F01L 3/22

IPC 8 full level

F01L 3/00 (2006.01); **F01L 3/22** (2006.01)

CPC (source: EP KR)

F01L 3/22 (2013.01 - EP KR); **F01L 2820/01** (2013.01 - EP); **F02F 2007/0097** (2013.01 - EP)

Cited by

US10989321B2

Designated contracting state (EPC)

AT BE CH CY DE DK ES FI FR GB GR IE IT LI LU MC NL PT SE TR

DOCDB simple family (publication)

WO 0206640 A1 20020124; AT E268863 T1 20040615; AU 8761101 A 20020130; CN 100410501 C 20080813; CN 1443271 A 20030917; DE 10034773 A1 20020207; DE 10034773 B4 20060817; DE 50102540 D1 20040715; EP 1301693 A1 20030416; EP 1301693 B1 20040609; ES 2222390 T3 20050201; JP 2004504525 A 20040212; JP 3990275 B2 20071010; KR 100689030 B1 20070302; KR 20030016367 A 20030226; NO 20030207 D0 20030115; NO 20030207 L 20030120; NO 335483 B1 20141215; PL 200334 B1 20081231; PL 362714 A1 20041102; PT 1301693 E 20041029; RU 2242620 C2 20041220; TR 200402016 T4 20041021

DOCDB simple family (application)

EP 0108099 W 20010713; AT 01967166 T 20010713; AU 8761101 A 20010713; CN 01812987 A 20010713; DE 10034773 A 20000718; DE 50102540 T 20010713; EP 01967166 A 20010713; ES 01967166 T 20010713; JP 2002512517 A 20010713; KR 20037000046 A 20030103; NO 20030207 A 20030115; PL 36271401 A 20010713; PT 01967166 T 20010713; RU 2003104816 A 20010713; TR 200402016 T 20010713