

Title (en)

EXHAUST VALVE FOR AN INTERNAL COMBUSTION ENGINE

Publication

EP 0024890 B1 19840314 (EN)

Application

EP 80302900 A 19800821

Priority

DK 361279 A 19790829

Abstract (en)

[origin: EP0024890A1] In the stationary and/or the movable valve part (1, 4) of the exhaust valve there is provided an annular chamber (9) formed as a circumferential recess in the surface of the valve part (4) in question facing the other valve part. The annular chamber is located intermediate the seating surfaces (5, 6) of the valve parts and the combustion chamber (10) of the engine cylinder and it communicates with the combustion chamber through a relatively narrow inlet when the valve is closed. During the compression period of the engine cylinder's working cycle the annular chamber is filled by pure and relatively cool air, and if local gaps are present between the seating surfaces, that air acts as a barrier preventing the leakage of substantial amounts of hot and aggressive combustion gases through the gaps during the initial part of the expansion period. This prevents the valve parts from being subjected, adjacent to said gaps, to a high temperature rise and concomitant heavy corrosive attacks which would lead to a rapid enlargement of the gaps. The invention, therefore, prolongs the lifetime of the valve by delaying the moment when a refurbishing of the seating surfaces becomes necessary.

IPC 1-7

F01L 3/20

IPC 8 full level

F01L 3/02 (2006.01); **F01L 3/04** (2006.01); **F01L 3/20** (2006.01); **F01L 3/22** (2006.01)

CPC (source: EP)

F01L 3/02 (2013.01); **F01L 3/04** (2013.01); **F01L 3/20** (2013.01); **F01L 3/22** (2013.01)

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WO206640A1; DE3425690A1; DE3331145A1; DE19754138A1; DE19754138B4; DE4301632A1; DE4301632C2; DE10034773A1; DE10034773B4; CN100410501C; CN113557351A; EP2287450A1; NO20140690A1; US8245682B2; US11060425B2; WO2020185337A1; EP3450707B1; EP3450707B2

Designated contracting state (EPC)

BE DE FR GB IT NL SE

DOCDB simple family (publication)

EP 0024890 A1 19810311; EP 0024890 B1 19840314; BR 8005413 A 19810310; DE 3066986 D1 19840419; DK 144217 B 19820118; DK 144217 C 19820621; DK 361279 A 19810301; ES 494569 A0 19810601; ES 8105441 A1 19810601; FI 67252 B 19841031; FI 67252 C 19850211; FI 802721 A 19810301; IE 50116 B1 19860219; IE 801810 L 19810228; JP S5634915 A 19810407; JP S6336403 B2 19880720; NO 154807 B 19860915; NO 154807 C 19861229; NO 802533 L 19810302; PL 124723 B1 19830228; PL 226485 A1 19810522; YU 213080 A 19830121; YU 41940 B 19880229

DOCDB simple family (application)

EP 80302900 A 19800821; BR 8005413 A 19800827; DE 3066986 T 19800821; DK 361279 A 19790829; ES 494569 A 19800828; FI 802721 A 19800828; IE 181080 A 19800828; JP 11487380 A 19800822; NO 802533 A 19800827; PL 22648580 A 19800829; YU 213080 A 19800826