

Title (en)

DEVICE FOR CONTROLLING THE OPENING AND CLOSING OF THE COMBUSTION CHAMBER OF AN INTERNAL-COMBUSTION ENGINE

Publication

EP 0152321 B1 19871028 (FR)

Application

EP 85400107 A 19850123

Priority

- FR 8410675 A 19840203
- FR 8500637 A 19850117

Abstract (en)

[origin: EP0152321A1] 1. Device for controlling the flow of the gas issuing from and flowing into the combustion chamber (2) of an internal combustion engine, constituted by a rotative valve cock or rotor (1) comprising at least one inner channel (3) or a lateral cut (24) defining transverse exhaust or inlet flow passages, respectively, a passage (5) directly connected to the combustion chamber (2), said valve cock (1) being enclosed in a transverse bore (4) into which opens the orifice of said passage formed in a sealing ring (6) which is placed in a bore (7) wherein it slides, said sealing ring (6) being applied onto the rotor (1) by a continuous contact surface (22) around the orifice of said passage (5) under the effect of the pressure prevailing within said combustion chamber (2) and surrounded by one or more sealing elements (11) such as sealing segments, while being provided with injection means (19, 23) for injecting oil onto said valve cock (1), characterized in that said sealing ring (6) is crossed through, at least at its periphery, by a pressure oil circuit (13, 14, 16) directed toward the oil collector and adapted to cool said ring (6), and in that said injection means (19, 32) which are connected to said oil circuit (13, 14, 16) cross axially at least a portion of the annular section of said ring (6) and open into an uninterrupted annular distributing groove (21) provided within the continuous contact surface (22) defined on a strip of small width along the general intersecting line of two cylinders, while opening at the interface (e) existing between said contact surface (22) and the outer surface (8) of said rotor (1).

IPC 1-7

F01L 7/02; **F01L 7/16**

IPC 8 full level

F01L 7/02 (2006.01); **F01L 7/16** (2006.01); **F02B 1/04** (2006.01); **F02B 75/02** (2006.01)

CPC (source: EP)

F01L 7/022 (2013.01); **F01L 7/16** (2013.01); **F02B 1/04** (2013.01); **F02B 2075/025** (2013.01); **F02B 2075/027** (2013.01)

Cited by

DE102005000034A1; EP0383695A1; FR2643417A1; ES2249068A1; WO9110814A1

Designated contracting state (EPC)

AT DE GB NL SE

DOCDB simple family (publication)

EP 0152321 A1 19850821; **EP 0152321 B1 19871028**; BE 901637 A 19850801; DE 3560844 D1 19871203; JP H0457845 B2 19920914; JP S60198315 A 19851007

DOCDB simple family (application)

EP 85400107 A 19850123; BE 6048059 A 19850201; DE 3560844 T 19850123; JP 1848885 A 19850201