Title (en)

CYLINDER HEAD FOR AN AIR-COOLED INTERNAL-COMBUSTION PISTON ENGINE

Publication

EP 0123101 B1 19871125 (DE)

Application

EP 84102773 A 19840314

Priority

DE 3314720 A 19830422

Abstract (en)

[origin: EP0123101A2] 1. An air-cooled reciprocating-piston internal combustion engine including at least one row of cylinders having separate cylinder heads (1) arranged side-by-side, in which each head is provided with cooling fins (8, 8a, 8b, 8c, 8d), with eyelets (9) accommodating fastening bolts (23) and with at least one each inlet and outlet valve, in which the valve stems extend substantially parallel with the respective cylinder axis and an imaginary plane containing the axes of the valve-stem guides (20, 22) is inclined at an acute angle to the engine's longitudinal direction, in which the inlet port (2) starts on a first side (16) - which extends in the engine's longitudinal direction and which constitutes the air-supply side (16) against which the cooling air flows - substantially at the centre of the cylinder head (1), in which the outlet port (3) terminates substantially perpendicularly to a second side (17) - which constitutes the spent-air side (17) arranged opposite the air-supply side (16), and in which a sheetmetal deflector (14a and 14b respectively) is arranged on each of the outermost cylinder heads (1) of the or each row of cylinders substantially parallel with a third (18) and, respectively, a fourth (18) side of each of said cylinder heads (1), the third and fourth sides being disposed transversely to and forming connections between the air-supply side (16) and the spent-air side (17), characterised in that any two adjacent cylinder heads (1) form - by the outer contours of their respective inlet and oulet ports (2, 3) in conjunction with central regions (41) located between their respective valve-stem guides (20, 22) and with those of their respective cooling fins (8, 8a, 8b) which extend substantially transversely to the respective cylinder axes - a cooling-air channel (5) which is curved at least once and is contained in a substantially horizontal plane passing through the cylinder head's top region (7) remote from the respective cylinder, and in that, circumferentially, each cylinder head's bottom region (6) adjoining the respective cylinder is provided mainly at its spent-air side (17) and its fourth side (19) opposite the stem guide (20) of its inlet valve with the cooling fins and with the eyelets (9) for the fastening bolts.

IPC 1-7

F02F 1/32

IPC 8 full level

F01P 1/02 (2006.01); F02F 1/32 (2006.01)

CPC (source: EP)

F02F 1/32 (2013.01)

Cited by

CN102400811A; EP1391583A1; US6996992B2

Designated contracting state (EPC)

AT DE FR GB IT

DOCDB simple family (publication)

**EP 0123101 A2 19841031; EP 0123101 A3 19851113; EP 0123101 B1 19871125**; AT E31105 T1 19871215; CA 1232501 A 19880209; DE 3314720 A1 19841025; DE 3467793 D1 19880107; JP S59206652 A 19841122

DOCDB simple family (application)

EP 84102773 Å 19840314; AT 84102773 T 19840314; CA 452380 A 19840419; DE 3314720 A 19830422; DE 3467793 T 19840314; JP 7881284 A 19840420