

Title (en)  
INTERNAL COMBUSTION ENGINE WITH A PISTON- AND AN INTERNAL CYLINDER WALL COOLING

Publication  
**EP 0167976 B1 19880427 (DE)**

Application  
**EP 85108225 A 19850703**

Priority  
DE 3425228 A 19840709

Abstract (en)  
[origin: EP0167976A2] 1. An internal combustion engine including a system for cooling the or each piston and the interior of its associated cylinder, the system comprising at least one cooling chamber (5) defined by the piston (1) and the cylinder (2), and suitable piston-sealing means disposed at the piston's end portion closest to the combustion chamber, for example piston rings, in which the cooling chamber (5) extends in circumferential direction around the piston (1) and is provided with at least one each coolant inlet and coolant outlet for a liquid coolant, and in which the cooling chamber (5) includes at least two, substantially axially extending, conducting pieces, characterized in that the conducting pieces are dividing walls (8), that the height of the dividing walls (8)-measured along the direction of the cylinder axis - is less than the overall height - measured in the same direction - of the cooling chamber (5), that the dividing walls (8) divide a first axial section of the cooling chamber (5) in circumferential direction around the piston (1) into at least two separate subchambers (9) which communicate with one another via a second axial section of the cooling chamber (5) not provided with dividing walls, and in that a coolant inlet (10) is associated with one of the subchambers (9) and a coolant outlet (11) with the other circumferentially adjoining subchamber (9) or subchambers.

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**F02F 1/14**; **F02F 3/22**

IPC 8 full level  
**F02F 1/14** (2006.01); **F02F 3/22** (2006.01)

CPC (source: EP)  
**F02F 1/14** (2013.01); **F02F 3/22** (2013.01)

Citation (examination)  
DE 2541966 A1 19770324 - VOX LUMATIC GMBH

Cited by  
CN110763475A; DE19953384C1; DE19747746C1; GB2291160A; GB2291160B; EP0913566A2

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