

Title (en)  
Internal combustion engine

Title (de)  
Brennkraftmaschine

Title (fr)  
Moteur à combustion interne

Publication  
**EP 0636772 B1 19970806 (DE)**

Application  
**EP 94108440 A 19940601**

Priority  
DE 4325141 A 19930727

Abstract (en)  
[origin: EP0636772A1] The invention relates to an internal combustion engine with a cylinder crankcase which has at least one cylinder covered by a cylinder head, in which cylinder a piston, articulated by means of a connecting rod on a crankshaft supported in the cylinder crankcase, is capable of moving, the internal combustion engine having cooling oil chambers, a lubrication system and an oil pump, which are flow-connected in series. The object of the invention is to simplify the oil circuit of the said internal combustion engine, thereby reducing its cost. The object is achieved in that each cylinder has a cylinder cooling chamber and each cylinder head a head cooling chamber, the individual cylinder cooling chambers and the individual head cooling chambers being interconnected and the cylinder cooling chambers and the head cooling chambers as a whole being connected in series. <IMAGE>

IPC 1-7  
**F01P 3/02**; **F01P 9/00**; **F01M 1/02**; **F01M 5/00**; **F01P 11/16**

IPC 8 full level  
**F01M 1/02** (2006.01); **F01M 5/00** (2006.01); **F01P 3/02** (2006.01); **F01P 9/00** (2006.01); **F01P 11/16** (2006.01); **F01M 1/08** (2006.01); **F01M 1/10** (2006.01); **F01M 1/16** (2006.01); **F01M 9/10** (2006.01); **F01P 3/00** (2006.01); **F01P 7/14** (2006.01)

CPC (source: EP US)  
**F01M 1/02** (2013.01 - EP US); **F01M 5/00** (2013.01 - EP US); **F01P 3/02** (2013.01 - EP US); **F01P 9/00** (2013.01 - EP US); **F01P 11/16** (2013.01 - EP US); **F01M 1/08** (2013.01 - EP US); **F01M 1/10** (2013.01 - EP US); **F01M 1/16** (2013.01 - EP US); **F01M 5/005** (2013.01 - EP US); **F01M 9/107** (2013.01 - EP US); **F01P 2003/006** (2013.01 - EP US); **F01P 2003/028** (2013.01 - EP US); **F01P 2007/143** (2013.01 - EP US); **F01P 2060/08** (2013.01 - EP US)

Cited by  
DE102006048929A1; DE102005035532A1; EP2532847A4

Designated contracting state (EPC)  
AT DE FR GB IT

DOCDB simple family (publication)  
**EP 0636772 A1 19950201**; **EP 0636772 B1 19970806**; AT E156567 T1 19970815; DE 4325141 A1 19950202; DE 59403620 D1 19970911; US 5483928 A 19960116

DOCDB simple family (application)  
**EP 94108440 A 19940601**; AT 94108440 T 19940601; DE 4325141 A 19930727; DE 59403620 T 19940601; US 27347594 A 19940711