

Title (en)  
Internal-combustion engine

Title (de)  
Brennkraftmaschine

Title (fr)  
Moteur à combustion interne

Publication  
**EP 0262598 B2 19970319 (DE)**

Application  
**EP 87114010 A 19870925**

Priority  
DE 3633576 A 19861002

Abstract (en)  
[origin: US4834029A] A cooling circuit (5) for an internal combustion engine in which a throttle (2) is provided upstream of a heat exchanger (10, 11). The throttle (2) equalizes the oil pressure in the internal combustion engine in front of the heat exchangers and insures that this occurs almost independently of the temperature of the oil. By this provision, the heat exchangers can be fabricated with the least expense since the danger of bursting is reduced.

IPC 1-7  
**F01P 3/20**; **F01P 9/00**; **F01M 1/16**; **F01M 5/00**

IPC 8 full level  
**F01M 1/16** (2006.01); **F01M 5/00** (2006.01); **F01P 3/20** (2006.01); **F01P 9/00** (2006.01); **F01P 3/00** (2006.01)

CPC (source: EP US)  
**F01M 1/16** (2013.01 - EP US); **F01M 5/005** (2013.01 - EP US); **F01P 3/20** (2013.01 - EP US); **F01P 9/00** (2013.01 - EP US);  
**F01P 2003/006** (2013.01 - EP US); **F01P 2060/08** (2013.01 - EP US)

Cited by  
EP0636772A1

Designated contracting state (EPC)  
AT DE FR GB IT

DOCDB simple family (publication)  
**EP 0262598 A2 19880406**; **EP 0262598 A3 19881214**; **EP 0262598 B1 19910821**; **EP 0262598 B2 19970319**; AT E66519 T1 19910915;  
DE 3633576 A1 19880407; DE 3772314 D1 19910926; US 4834029 A 19890530

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