

Title (en)  
Cooling system for an internal combustion engine

Title (de)  
Kühlanlage für eine Brennkraftmaschine

Title (fr)  
Système de refroidissement pour un moteur à combustion interne

Publication  
**EP 0640753 B1 19980812 (DE)**

Application  
**EP 94108811 A 19940608**

Priority  
DE 4324178 A 19930719

Abstract (en)  
[origin: EP0640753A1] In a cooling system for an internal combustion engine (10) of a motor vehicle with a radiator (11) and a thermostat valve (15), by means of which the temperature of the coolant can be controlled in warm-up operation, mixed operation and radiator operation, the thermostat valve (15) containing an expansion element, which is electrically heatable for reducing the coolant temperature, the expansion element is designed in such a way that in warm-up operation and/or in mixed operation the coolant temperature is adjusted to an upper working temperature limit without heating of the expansion element. In addition a control unit is provided which, as a function of detected operating and/or environmental variables of the internal combustion engine, triggers the heating of the expansion element as required, in order to shift the operating mode of the cooling system from warm-up operation or from mixed operation at the upper working temperature limit to mixed operation or radiator operation at a coolant temperature lower than the upper working temperature limit. <IMAGE>

IPC 1-7  
**F01P 7/16**

IPC 8 full level  
**F01P 7/16** (2006.01); **F03G 7/06** (2006.01)

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**F01P 7/167** (2013.01 - EP US); **F01P 2025/13** (2013.01 - EP US); **F01P 2025/32** (2013.01 - EP US); **F01P 2025/62** (2013.01 - EP US); **F01P 2025/64** (2013.01 - EP US); **F01P 2025/66** (2013.01 - EP US); **F01P 2070/04** (2013.01 - EP US)

Cited by  
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