

Title (en)
DEVICE FOR SECURING A COOLING CIRCUIT OF AN INTERNAL-COMBUSTION ENGINE

Publication
EP 0177860 A3 19870325 (DE)

Application
EP 85112273 A 19850927

Priority
DE 3436702 A 19841006

Abstract (en)
[origin: ES8608629A1] A device is provided for protecting the coolant circulation in an internal combustion engine, especially a motor vehicle engine, from excess pressure. A first pressure control valve is arranged in the upper region of a coolant-carrying tank and adjusted to a first opening pressure. A float is arranged in the tank which, in a sealing manner, can be engaged with a lead-in to the pressure control valve so that, in the case of an excessive rise of the coolant in the tank, the pressure control valve is not operative. The ejection of cooling water in the switch-off phase of a previously heated internal combustion engine is thereby prevented. In order to avoid an unacceptable increase of pressure in the coolant-circulating system, a second pressure control valve is provided which is designed for a higher opening pressure than the first one. As a result, the coolant-circulating system is protected from excessive pressures.

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CPC (source: EP US)
F01P 11/029 (2013.01 - EP US); **F01P 11/14** (2013.01 - EP US); **F01P 11/18** (2013.01 - EP US); **F01P 11/0238** (2013.01 - EP US)

Citation (search report)
• [X] US 1541073 A 19250609 - SOHM ALFRED L
• [X] US 1531579 A 19250331 - SOHM ALFRED L
• [A] DE 3143749 A1 19830511 - MAGIRUS DEUTZ AG [DE]
• [A] DE 2104071 A1 19710826
• [A] FR 1014869 A 19520825 - TECH ET COMMERCIALE D INSTALLA
• [A] FR 2439922 A1 19800523 - PEROLO CLAUDE
• [A] FR 2476790 A1 19810828 - LAFON GEORGES [FR]
• [A] DE 2509995 A1 19751218 - NIPPON DENSO CO [JP], et al
• [A] FR 644445 A 19281008

Cited by
DE4228185A1; EP0464317A1; DE3803165A1; DE29617824U1; DE19642114A1; DE4233038C1; FR2696501A1; US5357909A; GB2253695A; FR2673679A1; US5163506A; GB2253695B; US9856777B2; US6367644B1; WO0169057A1; WO2024179780A1; WO9928605A1; WO0175282A1; WO2016094410A1

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