

Title (en)
COOLING DEVICE FOR AN INTERNAL-COMBUSTION ENGINE

Publication
EP 0374038 B1 19931013 (FR)

Application
EP 89403455 A 19891213

Priority
FR 8816872 A 19881214

Abstract (en)
[origin: EP0374038A1] Device for the liquid cooling of an internal-combustion engine having a main cooling circuit comprising a radiator (4) connected to the engine (1) by means of a liquid intake pipe (5) and a return pipe (3), means (2) for circulating the liquid between the engine (1) and the radiator (4), and a thermostatic valve (6) capable of interrupting the circulation of liquid when the temperature of the latter is below a given value, at least one secondary cooling circuit connected in parallel with the main circuit and comprising a low-volume degassing chamber (14) connected to the engine (1) by means of a liquid intake pipe (17) and an offtake pipe (18), and means (2) for circulating the liquid between the engine (1) and the degassing chamber (14), and an expansion vessel (8) connected to one of the cooling circuits. The expansion vessel (8) is connected to the main cooling circuit, and one (19) of the walls of the degassing chamber (14) has a port (20) connected to the expansion vessel (8) by means of a shutter (21 or 26) designed to open when gas is present in the chamber (14). <IMAGE>

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F01P 11/02

IPC 8 full level
F01P 3/18 (2006.01); **F01P 7/16** (2006.01); **F01P 11/02** (2006.01)

CPC (source: EP)
F01P 11/028 (2013.01); **F01P 11/0285** (2013.01); **F01P 2060/08** (2013.01)

Citation (examination)
EP 0250734 A2 19880107 - MAN NUTZFAHRZEUGE GMBH [DE]

Cited by
EP2386740A3; DE4106297A1; EP2615273A1; EP1905975A1; EP2375027A3; EP2034155A1; EP2187015A1; FR2938298A1; FR2690950A1; ES2066718A2; DE4215189C2; US8485143B2; US7673594B2; WO2009113019A3

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