

Title (en)
Coolant loop for a combustion engine

Title (de)
Kühlmittelkreislauf für eine Brennkraftmaschine

Title (fr)
Circuit de refroidissement d'un moteur à combustion

Publication
EP 2581580 A3 20170621 (DE)

Application
EP 12006440 A 20120914

Priority
DE 102011116202 A 20111015

Abstract (en)
[origin: CN103046994A] The circuit (1) has a main cooling circuit (1a) that is provided with heat sink (3) and an auxiliary cooling circuit (1b). A surge tank (4) is provided with a vent line (10) for flowing coolant to filler cap (5) through a charging hole (6). A shut-off valve (8) is arranged in the surge tank. The coolant is passed from surge tank to main cooling circuit and auxiliary cooling circuit through a filling spacer (9) by releasing the shut-off valve.

IPC 8 full level
F01P 11/02 (2006.01)

CPC (source: EP KR)
F01P 3/20 (2013.01 - KR); **F01P 3/22** (2013.01 - KR); **F01P 11/00** (2013.01 - KR); **F01P 11/0238** (2013.01 - EP); **F01P 11/028** (2013.01 - EP); **F01P 11/0285** (2013.01 - EP); **F01P 11/029** (2013.01 - EP)

Citation (search report)
[X1] GB 1488512 A 19771012 - PERKINS ENGINES LTD

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Designated extension state (EPC)
BA ME

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DE 102011116202 B3 20121004; CN 103046994 A 20130417; CN 103046994 B 20150902; EP 2581580 A2 20130417; EP 2581580 A3 20170621; KR 101362579 B1 20140213; KR 20130040739 A 20130424

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