

Title (en)

COOLANT CIRCUIT

Title (de)

KÜHLMITTELKREISLAUF

Title (fr)

CIRCUIT DE RÉFRIGÉRANT

Publication

EP 2932064 B1 20190904 (DE)

Application

EP 13802939 A 20131209

Priority

- DE 102012223454 A 20121217
- EP 2013075929 W 20131209

Abstract (en)

[origin: WO2014095451A1] The invention relates to a coolant circuit for an internal combustion engine, with a coolant pump, at least one coolant line, a radiator and a coolant cavity in the internal combustion engine, wherein the coolant pump, the coolant line, the radiator and the coolant cavity are filled with a coolant. In order to create a coolant circuit for an internal combustion engine that protects the internal combustion engine permanently from damage due to improper usage of coolants, at least one sensor for monitoring the coolant concentration is fixedly and permanently arranged in and/or on the coolant circuit.

IPC 8 full level

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CPC (source: CN EP US)

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F01P 11/20 (2013.01 - CN EP US); **F01P 2025/13** (2013.01 - CN EP US); **F01P 2025/80** (2013.01 - CN EP US)

Citation (examination)

- JP H10259730 A 19980929 - KUBOTA KK
- EP 2698516 A1 20140219 - TOYOTA MOTOR CO LTD [JP]

Designated contracting state (EPC)

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DOCDB simple family (publication)

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US 2015369116 A1 20151224; US 9850804 B2 20171226; WO 2014095451 A1 20140626

DOCDB simple family (application)

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