

Title (en)

ENGINE COOLING APPARATUS AND ENGINE COOLING METHOD

Title (de)

MOTORKÜHLUNGSVORRICHTUNG UND MOTORKÜHLUNGSVERFAHREN

Title (fr)

APPAREIL DE REFROIDISSEMENT DE MOTEUR ET PROCÉDÉ DE REFROIDISSEMENT DE MOTEUR

Publication

**EP 2787189 A4 20150520 (EN)**

Application

**EP 12853010 A 20121127**

Priority

- JP 2011258712 A 20111128
- JP 2012080646 W 20121127

Abstract (en)

[origin: EP2787189A1] An object of the invention relates to a cooling system for an engine having an EGR system and the like and a cooling method for cooling the engine and is to provide a system and method for cooling an engine which realize a reduction in the capacity of a main radiator by giving a sub-radiator a function to assist the main radiator, a reduction in cost and an effective use of an installation space. A sub-control valve (22) is provided which detects a temperature of a liquid coolant in a main circulation path and separates part of the liquid coolant which is to be sent to a main radiator (16) to send it into a sub-circulation path in case the detected temperature of the liquid coolant exceeds an upper limit value of the temperature of the liquid coolant when an engine runs in a steady state, and the liquid coolant which is sent into the sub-circulation path (12) by the sub-control valve (22) is cooled in a sub-radiator (28) and is then caused to flow into a cooler device, while the liquid coolant in the sub-circulation path (12) is separated to be returned to an upstream side of a first pump (18) in the main circulation path (8).

IPC 8 full level

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CPC (source: EP US)

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Citation (search report)

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- [Y] WO 2009128768 A1 20091022 - SCANIA CV AB [SE], et al
- [A] WO 2004085807 A1 20041007 - SCANIA CV ABP [SE], et al
- See references of WO 2013080980A1

Designated contracting state (EPC)

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**EP 2787189 A1 20141008**; **EP 2787189 A4 20150520**; CN 103987935 A 20140813; JP 2013113182 A 20130610; US 2014326198 A1 20141106; WO 2013080980 A1 20130606

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