

Title (en)

COOLING SYSTEM FOR TWO-STAGE CHARGED ENGINES

Title (de)

KÜHLSYSTEM FÜR ZWEISTUFIG GELADENE MOTOREN

Title (fr)

SYSTÈME DE REFROIDISSEMENT POUR MOTEURS CHARGÉS À DEUX ÉTAGES

Publication

**EP 2761150 A1 20140806 (EN)**

Application

**EP 12761707 A 20120920**

Priority

- EP 11182936 A 20110927
- EP 2012003943 W 20120920
- EP 12761707 A 20120920

Abstract (en)

[origin: EP2574753A1] For flexible cooling of intake air under a range of environmental conditions, a cooling system of a two-stage turbocharged internal combustion engine may comprise a high temperature (HT) cooling circuit (30) and a low temperature (LT) cooling circuit (50). HT cooling circuit (30) may comprise a first pump (32) for pumping a first coolant through the HT cooling circuit (30) and a pre-compressed intake air high temperature cooler (34) for cooling pre-compressed intake air generated by a first compressor (12) of a low pressure stage turbocharger. The LT cooling circuit (50) may comprise a second pump (52) for pumping a second coolant through the LT cooling circuit (50) and a compressed intake air low temperature cooler (54) for cooling compressed intake air generated by a second compressor (14) of a high pressure stage turbocharger by compressing the pre-compressed intake air. The HT cooling circuit (30) may further comprise a compressed intake air high temperature cooler (36) positioned upstream of the compressed intake air low temperature cooler (54). The cooling system may provide for a flexible cooling of the intake air for different environmental situations.

IPC 8 full level

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CPC (source: EP)

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See references of WO 2013045057A1

Citation (examination)

WO 2009002233 A1 20081231 - VOLVO LASTVAGNAR AB [SE], et al

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