

Title (en)
COOLING CONTROLLER OF INTERNAL COMBUSTION ENGINE

Title (de)
KÜHLUNGSSTEUERUNG FÜR VERBRENNUNGSMOTOR

Title (fr)
COMMANDE DE REFROIDISSEMENT DE MOTEUR À COMBUSTION INTERNE

Publication
EP 2045452 A1 20090408 (EN)

Application
EP 07790595 A 20070711

Priority
• JP 2007063791 W 20070711
• JP 2006190205 A 20060711

Abstract (en)
When the coolant temperature is greater than or equal to a threshold value while an engine 1 is stopped, a cooling apparatus is driven to cool the engine 1. The threshold value is set as follows. That is, when the crank angle at the completion of stopping of the engine 1 is a crank angle at which a piston 4 of a cylinder (first combustion cylinder) in which a compression stroke takes place for the first time after the subsequent initiation of starting of the engine is at the bottom dead center, the threshold value is set to a coolant temperature (lower limit value) that does not cause pre-ignition in the initial explosion cylinder at the subsequent initiation of starting of the engine. Also, when the crank angle at the completion of stopping of the engine 1 is a crank angle at which the position of the piston 4 in the initial explosion cylinder is closer to the top dead center than the bottom dead center, the closer to the top dead center the position of the piston 4 provided by a crank angle, the higher the threshold value, which is set to a value higher than the lower limit value, becomes.

IPC 8 full level
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CPC (source: EP)
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Cited by
CN103029569A; CN102191991A; DE102011004998B4; CN102449281A; CN104093960A; EP2813695A4; US9404410B2; US8733299B2; FR2944236A1; CN102449282A; CN104033230A; US2014257676A1; US9828932B2; DE102014102410B4; WO2010116106A1

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