

Title (en)

FUNCTIONAL SYNERGIES IN THE INTEGRATION OF ORC SYSTEMS IN COMBUSTION ENGINES

Title (de)

FUNKTIONSSYNERGIEN BEI DER INTEGRATION VON ORC-SYSTEMEN IN VERBRENNUNGSKRAFTMOTOREN

Title (fr)

SYNERGIES FONCTIONNELLES LORS DE L'INTEGRATION DE SYSTEME ORC DANS DES MOTEURS A COMBUSTION INTERNE

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Application

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Priority

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Abstract (en)

[origin: WO2017067790A1] The system according to the invention comprises a heat source and a cooling device for discharging the heat from the heat source, wherein the cooling device comprises: a heat exchanger/radiator for transferring heat to a surrounding medium, in particular wherein the radiator is an air cooler and the surrounding medium is air; and a thermodynamic cycle device, in particular an ORC device comprising a working fluid, an evaporator for evaporating the working medium by transferring heat from the heat source to the working medium, an expansion device for generating mechanical energy, and a condenser for condensing the working medium expanded in the expansion device; wherein the cooling device additionally comprises a condenser-coolant circuit for discharging heat out of the condenser of the thermodynamic cycle device via the heat exchanger/radiator. The method according to the invention is suitable for discharging heat from a heat source with a cooling device.

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