

Title (en)
RANKINE CYCLE

Title (de)
RANKINE-KREISLAUF

Title (fr)
CYCLE DE RANKINE

Publication
EP 2728131 A1 20140507 (EN)

Application
EP 12804209 A 20120612

Priority

- JP 2011146031 A 20110630
- JP 2012064991 W 20120612

Abstract (en)
A Rankine cycle 101 where, in a circulation channel of a refrigerant, a waste gas boiler 113 exchanging heat between the refrigerant and exhaust gas, an expander 114, a condenser 115 and a pump 111 are provided in order, includes a temperature sensor 131 sensing the temperature of the refrigerant flowing out of the waste gas boiler 113, a pressure sensor 132 sensing the pressure of the refrigerant flowing through the waste gas boiler 113, a bypass flow channel 3 and a flow rate regulating valve 130 for adjusting the refrigerant flow rate to the waste gas boiler 113 and an ECU 140 controlling the flow rate regulating valve 130. The ECU 140 controls to change the temperature and pressure of the refrigerant sucked into the expander 114 while satisfying the relationship along the target pressure line TPL where the target pressure is set to increase the refrigerant density following the increase in the refrigerant temperature.

IPC 8 full level
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F01K 13/02 (2013.01 - US); **F01K 23/065** (2013.01 - EP US); **F01K 23/10** (2013.01 - EP US); **F01K 25/08** (2013.01 - EP US)

Citation (search report)
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