

Title (en)

ENHANCED WASTE HEAT RECOVERY SYSTEM AND METHOD ALLOWING GLOBAL OPTIMAL CONTROL

Title (de)

VERBESSERTES ABWÄRMERÜCKGEWINNUNGSSYSTEM UND VERFAHREN MIT GLOBALER OPTIMALER STEUERUNG

Title (fr)

SYSTÈME DE RÉCUPÉRATION DE CHALEUR PERDUE PERFECTIONNÉ ET PROCÉDÉ PERMETTANT UNE COMMANDE OPTIMALE GÉNÉRALE

Publication

EP 3119996 A1 20170125 (EN)

Application

EP 15715035 A 20150320

Priority

- US 201461968513 P 20140321
- US 2015021682 W 20150320

Abstract (en)

[origin: WO2015143280A1] A waste heat recovery system and control system and method of controlling a waste heat recovery system and control system is provided. The waste heat recovery system and control system comprises a pump, a heat exchanger, an expansion device, a condenser, a plurality of sensors, and a controller. The heat exchanger is in thermal communication with an exhaust of the internal combustion engine. The condenser is in thermal communication with the expansion device and the pump. The plurality of sensors is in communication with the waste heat recovery system. The controller is in communication with the plurality of sensors. In response to information obtained from the plurality of sensors, the controller calculates an efficiency of the waste heat recovery system based on models of the waste heat recovery system and implements a set of control inputs to implement the calculated efficiency on the waste heat recovery system.

IPC 8 full level

F01K 23/06 (2006.01); **F01K 23/10** (2006.01)

CPC (source: CN EP US)

F01K 23/065 (2013.01 - CN EP US); **F01K 23/101** (2013.01 - CN EP US)

Citation (search report)

See references of WO 2015143280A1

Citation (examination)

DE 102010019718 A1 20111110 - ORCAN ENERGY GMBH [DE]

Designated contracting state (EPC)

AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

Designated extension state (EPC)

BA ME

DOCDB simple family (publication)

WO 2015143280 A1 20150924; CN 106103912 A 20161109; EP 3119996 A1 20170125; US 2017074122 A1 20170316

DOCDB simple family (application)

US 2015021682 W 20150320; CN 201580015199 A 20150320; EP 15715035 A 20150320; US 201515124739 A 20150320