

Title (en)
EXHAUST HEAT RECOVERY SYSTEM

Title (de)
ABHITZESYSTEM

Title (fr)
SYSTÈME DE RÉCUPÉRATION DE LA CHALEUR DES GAZ D'ÉCHAPPEMENT

Publication
EP 2018285 A1 20090128 (EN)

Application
EP 07734538 A 20070511

Priority
• IB 2007001228 W 20070511
• JP 2006134865 A 20060515

Abstract (en)
[origin: WO2007132326A1] An exhaust heat recovery system (10) includes an exhaust heat recovery heat exchanger (18) in which heat is transferred from exhaust gas discharged from an internal combustion engine (12) to an engine coolant for cooling the internal combustion engine (12), and a heat pump system (22) for recovering exhaust heat of exhaust gas. The heat pump system (22) includes a refrigerant circulation passage (24) for circulating CO₂ refrigerant, a heat-absorbing heat exchanger (32) in which heat is transferred from exhaust gas to the CO₂ refrigerant, and a heat-releasing heat exchanger (28) in which the exhaust heat recovered by heat transfer to the CO₂ refrigerant in the heat-releasing heat exchanger (32) is recovered.

IPC 8 full level
B60H 1/02 (2006.01); **F25B 30/06** (2006.01)

CPC (source: EP US)
B60H 1/00921 (2013.01 - EP US); **B60H 1/025** (2013.01 - EP US); **F25B 30/06** (2013.01 - EP US); **B60H 2001/00949** (2013.01 - EP US); **Y02B 30/52** (2013.01 - EP US)

Citation (search report)
See references of WO 2007132326A1

Cited by
US10428713B2

Designated contracting state (EPC)
DE FR GB

Designated extension state (EPC)
AL BA HR MK RS

DOCDB simple family (publication)
WO 2007132326 A1 20071122; CN 101443205 A 20090527; EP 2018285 A1 20090128; JP 2007303435 A 20071122; JP 4197005 B2 20081217; US 2009183697 A1 20090723

DOCDB simple family (application)
IB 2007001228 W 20070511; CN 200780017718 A 20070511; EP 07734538 A 20070511; JP 2006134865 A 20060515; US 30081107 A 20070511