

Title (en)

EXTERNAL HEAT SOURCE ENGINE WITH SLIDE VALVES

Title (de)

MOTOR MIT EXTERNER WÄRMEQUELLE MIT SCHIEBERVENTILEN

Title (fr)

MOTEUR A SOURCE CHAUDE EXTERNE A BOISSEAUX

Publication

EP 3662153 B1 20240619 (FR)

Application

EP 18758546 A 20180802

Priority

- FR 1757398 A 20170802
- EP 2018071017 W 20180802

Abstract (en)

[origin: WO2019025555A1] The present invention concerns an external heat source engine comprising: - at least one cylinder (2), - a piston (3) that is movable back and forth in the cylinder, - a cylinder head (4) defining a working chamber (5) with the piston and the cylinder, - a heat exchanger (6) for exchanging heat between a working gas and a heat-transfer fluid, - a distribution comprising two rotary slide valves (20, 30) mounted so as to be able to rotate in the cylinder head and bringing the working chamber selectively into communication with the following resources: o a working gas inlet (A), o a cold end (B) of the exchanger, o a hot end (C) of the exchanger, o an exhaust (D). The slide valves (20, 30) comprise internal passages that open through the side wall of same through at least one opening that communicates selectively with the working chamber (5) via at least one opening formed in the cylinder head (4).

IPC 8 full level

F02G 1/02 (2006.01); **F01L 7/02** (2006.01); **F01L 7/16** (2006.01); **F01L 7/18** (2006.01)

CPC (source: EP US)

F01L 7/16 (2013.01 - US); **F02G 1/02** (2013.01 - EP US); **F01L 7/025** (2013.01 - EP); **F01L 7/026** (2013.01 - EP US); **F01L 7/16** (2013.01 - EP); **F01L 7/18** (2013.01 - EP US); **F02B 2075/027** (2013.01 - US); **F02G 2242/10** (2013.01 - EP US); **F02G 2270/90** (2013.01 - EP US)

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

DOCDB simple family (publication)

WO 2019025555 A1 20190207; CN 111108285 A 20200505; CN 111108285 B 20230516; EP 3662153 A1 20200610; EP 3662153 B1 20240619; FR 3069884 A1 20190208; FR 3069884 B1 20200221; US 11333047 B2 20220517; US 2020240297 A1 20200730

DOCDB simple family (application)

EP 2018071017 W 20180802; CN 201880055168 A 20180802; EP 18758546 A 20180802; FR 1757398 A 20170802; US 201816635616 A 20180802