

Title (en)

PISTON ENGINE DRIVABLE USING A STEAM POWER PROCESS

Title (de)

ÜBER EINEN DAMPFKRAFTPROZESS ANTREIBBARE KOLBENMASCHINE

Title (fr)

MOTEUR À PISTON POUVANT ÊTRE ENTRAÎNÉ PAR LE BIAIS D'UN PROCÉDÉ DE FORCE MOTRICE À VAPEUR

Publication

EP 2598719 A1 20130605 (DE)

Application

EP 11729990 A 20110706

Priority

- DE 102010038543 A 20100728
- EP 2011061416 W 20110706

Abstract (en)

[origin: WO2012013463A1] A piston engine (1) that can be driven using a steam power process and is used in particular for utilizing the waste heat from an internal combustion engine comprises a cylinder bore (5), a cylinder piston (6) which is arranged in the cylinder bore (5) and delimits an operating space (8) in the cylinder bore (5), a rod (21) which is connected to the cylinder piston (6), and a bearing point (37) on which the rod (21) and the cylinder piston (6) connected to the rod (21) are mounted. A peripheral gap (28) is predefined between the cylinder piston (6) and the cylinder bore (5), thus preventing frictional wear between the cylinder piston (6) and the cylinder bore (5), which is particularly advantageous when a water-based working fluid is conducted through the operating space (8) since steam has no lubricity.

IPC 8 full level

F01B 9/02 (2006.01)

CPC (source: EP US)

F01B 9/023 (2013.01 - EP US); **F01K 23/00** (2013.01 - US)

Citation (search report)

See references of WO 2012013463A1

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)

DE 102010038543 A1 20120202; CN 103026002 A 20130403; EP 2598719 A1 20130605; US 2013118174 A1 20130516;
WO 2012013463 A1 20120202

DOCDB simple family (application)

DE 102010038543 A 20100728; CN 201180036679 A 20110706; EP 11729990 A 20110706; EP 2011061416 W 20110706;
US 201113812699 A 20110706