Title (en)

ROTARY PISTON ENGINE

Title (de)

ROTATIONSKOLBENMOTOR

Title (fr)

MOTEUR À PISTON ROTATIF

Publication

EP 2737177 A4 20150506 (EN)

Application

EP 12817318 A 20120718

Prioritv

- FI 20115769 A 20110726
- FI 2012050740 W 20120718

Abstract (en)

[origin: WO2013014335A1] The invention relates to a rotary piston engine which includes a piston (1), a motion space of the piston in which striking motions of the piston (1) are arranged to rotate such that a rotation support shaft is in one of stationary rotation support points being at an equal distance from a centre point of the motion space, and as a path of a centre shaft of the piston is formed a planetary path such that, at the point of the centre shaft of the piston (1) or in its immediate vicinity, there is a planetary shaft being the rotation axis of the rotation of the piston (1), and a power transmission device. In the rotary piston engine according to the invention, the 360-degree rotation of the angles of the moving piston (1) is formed from at least twelve successive striking motion sections which are arranged to rotate for the duration of the striking motion around a polar axis being in one of at least three different rotation support points (P, PI or P2) such that torque in the piston rotation around its centre shaft (K) is even and to the path of the piston angles are formed at least three sections identical in relation to each other and motions of the centre shaft (K) of the piston are on a planetary path which includes substantially the same number of sections (A-B, B-C, C-A) and bends (A, B, C), at the point of which rotations are gentle, such that inertia forces caused by the motions of the piston are controlled, and that of rotational motions of the piston around the rotation support points (P, PI or P2) and spinning motions around its centre shaft (K) are arranged two connectable moment lines between the piston (1) and the main shaft (4) suitable for transmitting kinetic energy.

IPC 8 full level

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CPC (source: EP FI)

F01C 1/22 (2013.01 - EP FI); F01C 1/34 (2013.01 - FI); F01C 21/008 (2013.01 - EP); F04C 29/0071 (2013.01 - EP)

Citation (search report)

- [A] WO 2010026288 A1 20100311 STEAMMOTOR FINLAND OY AB LTD [FI], et al
- [A] WO 9810173 A1 19980312 AUVINEN RISTO [FI]
- See references of WO 2013014335A1

Designated contracting state (EPC)

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DOCDB simple family (application)

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