

Title (en)

Free piston engine having a hydraulic power transmission mechanism.

Title (de)

Freikolbenmaschine mit einem hydraulischen Übertragungsmechanismus.

Title (fr)

Moteur à piston libre avec un mécanisme de transmission hydraulique.

Publication

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Application

EP 85115091 A 19851128

Priority

JP 25141484 A 19841128

Abstract (en)

A free piston engine having a hydraulic power transmission mechanism. The engine includes at least one free piston (11a, 11b, 11c, 11d) adapted to reciprocate linearly, a rotary piston (33a) rotatably mounted on the crank pin of the crankshaft (31) to rotate about the crank pin and a hydraulic power transmission system (34a, 34b, 34c, 34d, 35). One end face of the or each free piston is exposed to pressure of combustion gas or compressed gas, whereas the other end face of the same is exposed to hydraulic pressure. The rotary piston (33a) has the contour of epitrochoidal curve as seen in the cross-sectional plane. Working hydraulic medium is filled in a space (35) of the hydraulic system as defined between the other end face of the free piston and the rotary piston so as to convert linear reciprocable movement of the free piston (11a, 11b, 11c, 11d) to rotational movement of the crankshaft (31).

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IPC 8 full level

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Cited by

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