

Title (en)

RECIPROCATING PISTON ENGINE COMPRISING A ROTATIVE CYLINDER

Title (de)

HUBKOLBENMASCHINE MIT UMLAUFENDEM ZYLINDER

Title (fr)

MOTEUR A PISTON ALTERNATIF COMPORTANT UN CYLINDRE ROTATIF

Publication

EP 1427925 A1 20040616 (DE)

Application

EP 02774600 A 20020911

Priority

- DE 10145478 A 20010914
- EP 0210196 W 20020911

Abstract (en)

[origin: US6928965B2] A reciprocating piston engine includes a rotor housing for transferring torque to an engine output drive; a contoured guide element in the rotor housing, having a closed, curvilinearly contoured shape, around which the rotor housing is rotatable; at least one compression unit in the rotor housing, each unit including a piston and a cylinder, with the piston having a straight line of action in a plane perpendicular to the axis of rotation of the rotor housing; a connecting rod, rigidly coupled to the piston, movable along a path determined by the contoured guide element, for transferring controlled movement specified by the contoured guide element to the piston; and a guide part, joined to the connecting rod, and movable along a separate guide in the rotor housing, with the connecting rod, the piston, and the guide part each performing a single stroke along a straight line in the rotor housing.

IPC 1-7

F02B 75/26; F02B 53/00

IPC 8 full level

F02B 75/22 (2006.01); **F01B 1/00** (2006.01); **F01B 5/00** (2006.01); **F01B 13/04** (2006.01); **F02B 53/00** (2006.01); **F02B 57/08** (2006.01);
F02B 75/26 (2006.01); **F02B 3/06** (2006.01); **F02B 75/02** (2006.01)

CPC (source: EP KR US)

F01B 13/045 (2013.01 - EP US); **F02B 57/08** (2013.01 - EP US); **F02B 75/26** (2013.01 - KR); **F02B 3/06** (2013.01 - EP US);
F02B 2075/025 (2013.01 - EP US); **F02F 2007/0097** (2013.01 - EP US)

Designated contracting state (EPC)

AT BE BG CH CY CZ DE DK EE ES FI FR GB GR IE IT LI LU MC NL PT SE SK TR

DOCDB simple family (publication)

WO 03025369 A1 20030327; AT E286203 T1 20050115; AU 2002340887 B2 20080703; CA 2460162 A1 20030327; CA 2460162 C 20100831;
CN 1287074 C 20061129; CN 1553988 A 20041208; DE 10145478 A1 20030528; DE 10145478 B4 20070118; DE 50201926 D1 20050203;
EP 1427925 A1 20040616; EP 1427925 B1 20041229; JP 2005503512 A 20050203; JP 3943078 B2 20070711; KR 100922024 B1 20091019;
KR 20040031074 A 20040409; RU 2004111293 A 20050520; RU 2293186 C2 20070210; US 2004216702 A1 20041104;
US 6928965 B2 20050816

DOCDB simple family (application)

EP 0210196 W 20020911; AT 02774600 T 20020911; AU 2002340887 A 20020911; CA 2460162 A 20020911; CN 02817831 A 20020911;
DE 10145478 A 20010914; DE 50201926 T 20020911; EP 02774600 A 20020911; JP 2003528974 A 20020911; KR 20047003563 A 20020911;
RU 2004111293 A 20020911; US 48972904 A 20040526