

Title (en)
RECIPROCATING PISTON ENGINE.

Title (de)
PENDELKOLBENMASCHINE.

Title (fr)
MOTEUR A PISTON ALTERNATIF.

Publication
EP 0390882 A1 19901010 (DE)

Application
EP 89909535 A 19890907

Priority
• CH 8900165 W 19890907
• CH 334888 A 19880907

Abstract (en)
[origin: WO9002867A1] A reciprocating piston engine with a cylinder crankcase (5) with curved cylinder walls (4) and a circular internal cross-section has a reciprocating piston (7) with integrated connecting rod shaft (8) and a circular connecting rod eye (9) which acts as a counterweight. This allows the centre (1) of the piston to trace curves of given shape, which results in a floating movement of the reciprocating piston (7) with very small lateral forces. The larger lateral amplitudes which result require special sealing strips (14) with corresponding pressure springs (15).

Abstract (fr)
Un moteur à piston alternatif comprend un carter de cylindre (5) dont les parois de cylindre (4) sont courbes et un carter interne circulaire (5) contenant un piston alternatif (7) à corps de bielle intégré (8) et un oeil circulaire (9) de tête de bielle qui sert de contre-poids. Le centre (1) du piston peut ainsi décrire des courbes de forme déterminable, de sorte que le piston alternatif (7) peut effectuer un mouvement oscillant sous l'effet de forces latérales minimales. Les amplitudes latérales importantes qui en résultent exigent des profilés d'étanchéité spéciaux (14) avec des ressorts de compression (15) correspondants.

IPC 1-7
F01B 9/02; F02F 1/18; F02F 3/00

IPC 8 full level
F01B 9/02 (2006.01); **F02F 1/18** (2006.01); **F02F 3/00** (2006.01)

CPC (source: EP)
F01B 9/026 (2013.01); **F02F 1/183** (2013.01); **F02F 3/0023** (2013.01); **F01B 2011/005** (2013.01); **F02F 2200/04** (2013.01);
F05C 2201/0448 (2013.01)

Citation (search report)
See references of WO 9002867A1

Cited by
CN103742392A; US2015345372A1; US9695739B2; US8206137B2

Designated contracting state (EPC)
AT BE CH DE FR GB IT LI LU NL SE

DOCDB simple family (publication)
WO 9002867 A1 19900322; AT E138154 T1 19960615; AU 4075489 A 19900402; DE 58909682 D1 19960620; EP 0390882 A1 19901010;
EP 0390882 B1 19960515; JP H03501044 A 19910307

DOCDB simple family (application)
CH 8900165 W 19890907; AT 89909535 T 19890907; AU 4075489 A 19890907; DE 58909682 T 19890907; EP 89909535 A 19890907;
JP 50893889 A 19890907