

Title (en)  
FREE-PISTON ENGINE

Title (de)  
FREIKOLBENMOTOR

Title (fr)  
MOTEUR A PISTONS LIBRES

Publication  
**EP 1232335 B1 20040204 (DE)**

Application  
**EP 00981162 A 20001106**

Priority  
• DE 0003886 W 20001106  
• DE 19956547 A 19991124  
• DE 10026728 A 20000530

Abstract (en)  
[origin: WO0138706A1] A free-piston engine is disclosed, whose engine piston may have a force applied, in the compression direction, by means of an hydraulic cylinder, which can, by means of a switching valve, be connected to the pressure in a high pressure storage device or a low pressure storage device. According to the invention, a valve arrangement, with a control piston, is arranged between the hydraulic cylinder and the switching valve, whose control surface controls a connection with the high pressure reservoir device.

IPC 1-7  
**F02B 71/04**; F01B 11/00

IPC 8 full level  
**F02B 71/00** (2006.01); **F01B 11/00** (2006.01); **F01B 11/04** (2006.01); **F01B 11/08** (2006.01); **F02B 71/04** (2006.01); **F02B 75/02** (2006.01)

CPC (source: EP)  
**F01B 11/007** (2013.01); **F02B 71/045** (2013.01); **F02B 2075/025** (2013.01)

Cited by  
DE102007040361A1; CN104775901A; DE102007016517A1

Designated contracting state (EPC)  
DE FR GB IT

DOCDB simple family (publication)  
**WO 0138706 A1 20010531**; EP 1232335 A1 20020821; EP 1232335 B1 20040204; JP 2003524727 A 20030819

DOCDB simple family (application)  
**DE 0003886 W 20001106**; EP 00981162 A 20001106; JP 2001540026 A 20001106