

Title (en)  
Reciprocating internal combustion engine with a movable head

Title (de)  
Kolbenbrennkraftmaschine mit beweglichem Zylinderkopf

Title (fr)  
Moteur alternatif à combustion interne à culasse mobile

Publication  
**EP 0603961 B1 19970319 (EN)**

Application  
**EP 93203576 A 19931217**

Priority  
IT MI922935 A 19921223

Abstract (en)  
[origin: EP0603961A1] A reciprocating internal combustion engine is proposed that allows a better exploitation of the energy delivered, produces less polluting emissions and is suitable for utilizing alternative fuels; the engine comprises at least one main piston (5; 53) sliding in a cylinder (4, 52) and operatively connected to a crank-shaft (6) and an elastically yielding head (7; 54) formed by at least one further piston (8; 55) sealingly sliding in the cylinder (4; 52), opposed to the main piston (5; 53), and subjected to the action of opposed first and second elastic means (18, 25; 57, 58) with balanced pre-loads. <IMAGE>

IPC 1-7  
**F02B 75/04**; **F02B 75/38**

IPC 8 full level  
**F02B 75/04** (2006.01); **F02B 75/38** (2006.01); **F02B 3/06** (2006.01)

CPC (source: EP)  
**F02B 75/042** (2013.01); **F02B 75/38** (2013.01); **F02B 3/06** (2013.01); **F02B 2275/14** (2013.01)

Cited by  
DE29613109U1; EP2260191A4; EP2000658A3; EP2290218A1; USRE41335E; US8857404B2; JP2011513634A

Designated contracting state (EPC)  
AT BE CH DE DK ES FR GB GR IE IT LI LU MC NL PT SE

DOCDB simple family (publication)  
**EP 0603961 A1 19940629**; **EP 0603961 B1 19970319**; AT E150523 T1 19970415; DE 69309020 D1 19970424; IT 1256224 B 19951129; IT MI922935 A0 19921223; IT MI922935 A1 19940623

DOCDB simple family (application)  
**EP 93203576 A 19931217**; AT 93203576 T 19931217; DE 69309020 T 19931217; IT MI922935 A 19921223