

Title (en)

HEAT ENGINE COMPRISING BALANCE SHAFTS WHICH CAN BE LOCKED BY A PIN

Title (de)

WÄRMEKRAFTMASCHINE MIT DURCH EINEN STIFT SPERRBAREN AUSGLEICHSWELLEN

Title (fr)

MOTEUR THERMIQUE COMPORTANT DES ARBRES D'EQUILIBRAGE SUSCEPTIBLES D'ETRE IMMOBILISES PAR UNE EPINGLE

Publication

**EP 1882113 A2 20080130 (FR)**

Application

**EP 06794421 A 20060512**

Priority

- FR 2006050436 W 20060512
- FR 0504769 A 20050512

Abstract (en)

[origin: FR2885661A1] Internal combustion engine with a crankshaft (12) equipped with a balancing unit (16) comprising a pair of balance shafts, namely a primary shaft (26) with a pinion (36) driven by a crown wheel (34) on the crankshaft and a secondary shaft (28) with a pinion (42) driven by a second pinion (40) on the first shaft, comprises transverse holes in the pinion ends of the balance shafts, the holes being aligned to receive a removable fastener (50) before the balancing unit is mounted on the engine block. An independent claim is also included for assembling an engine as above by introducing the fastener into the holes in the ends of the balance shafts, adjusting the angular position of the crown wheel on the crankshaft, mounting the balancing unit on the engine block, and removing the fastener.

IPC 8 full level

**F16F 15/26** (2006.01)

CPC (source: EP KR US)

**F02B 77/00** (2013.01 - KR); **F16C 3/00** (2013.01 - KR); **F16C 3/20** (2013.01 - KR); **F16F 15/26** (2013.01 - KR); **F16F 15/264** (2013.01 - EP US)

Citation (search report)

See references of WO 2007003812A2

Designated contracting state (EPC)

AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IS IT LI LT LU LV MC NL PL PT RO SE SI SK TR

DOCDB simple family (publication)

**FR 2885661 A1 20061117**; **FR 2885661 B1 20070803**; CN 101171439 A 20080430; CN 101171439 B 20100922; EP 1882113 A2 20080130; JP 2008540957 A 20081120; JP 4744598 B2 20110810; KR 101203305 B1 20121120; KR 20080013877 A 20080213; RU 2007146148 A 20090620; RU 2400656 C2 20100927; US 2009173308 A1 20090709; US 7921825 B2 20110412; WO 2007003812 A2 20070111; WO 2007003812 A3 20070308

DOCDB simple family (application)

**FR 0504769 A 20050512**; CN 200680015959 A 20060512; EP 06794421 A 20060512; FR 2006050436 W 20060512; JP 2008510623 A 20060512; KR 20077025275 A 20060512; RU 2007146148 A 20060512; US 91431906 A 20060512