

Title (en)

HEAT ENGINE PROVIDED WITH AN IMPROVED SYSTEM FOR VARYING THE COMPRESSION RATIO

Title (de)

WÄRMEKRAFTMASCHINE MIT VERBESSERTEM SYSTEM ZUR VERÄNDERUNG DER VERDICHTUNG

Title (fr)

MOTEUR THERMIQUE MUNI D'UN SYSTÈME DE VARIATION DU TAUX DE COMPRESSION AMÉLIORÉ

Publication

**EP 3469203 A1 20190417 (FR)**

Application

**EP 17726657 A 20170602**

Priority

- FR 1655307 A 20160609
- EP 2017063494 W 20170602

Abstract (en)

[origin: WO2017211727A1] The invention relates to a heat engine, including a system (11) for varying a compression ratio, which comprises: a crankshaft (12) including at least one crank pin (13) and at least one arm (17); at least one eccentric part (21) rotatably mounted on said crank pin (13), said eccentric part (21) including an eccentric outer surface (25) intended for engaging with one end of a connecting rod, as well as at least one toothed ring gear (28); a control device (31) for controlling the angular position of said eccentric part (21), characterised in that said control device (31) includes: an actuating shaft (32) provided with an actuating pinion (33); at least one intermediate shaft (40) passing axially, from side to side, through a journal (14) and said arm (17) of said crankshaft (12) via a corresponding bore, said intermediate shaft (40) being provided with a first intermediate pinion (41) meshing with said actuating pinion (33) and a second intermediate pinion (41') meshing with an eccentric part (21).

IPC 8 full level

**F02D 15/02** (2006.01); **F02B 75/04** (2006.01)

CPC (source: EP KR US)

**F02B 75/048** (2013.01 - EP KR US); **F02D 15/02** (2013.01 - EP KR US); **F16C 3/28** (2013.01 - EP KR); **F16C 3/28** (2013.01 - US);  
**F16C 23/10** (2013.01 - US); **F16H 21/22** (2013.01 - US); **F16H 37/124** (2013.01 - US)

Citation (search report)

See references of WO 2017211727A1

Designated contracting state (EPC)

AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

Designated extension state (EPC)

BA ME

DOCDB simple family (publication)

**WO 2017211727 A1 20171214**; CN 109312672 A 20190205; EP 3469203 A1 20190417; FR 3052495 A1 20171215; FR 3052495 B1 20200110;  
JP 2019519714 A 20190711; KR 20190016519 A 20190218; US 2019376445 A1 20191212

DOCDB simple family (application)

**EP 2017063494 W 20170602**; CN 201780034878 A 20170602; EP 17726657 A 20170602; FR 1655307 A 20160609;  
JP 2018563669 A 20170602; KR 20187037818 A 20170602; US 201716308209 A 20170602