

Title (en)
DEVICE FOR VARYING A COMPRESSION RATIO OF AN INTERNAL COMBUSTION ENGINE AND METHOD FOR USING SAID DEVICE

Title (de)
VORRICHTUNG ZUR ÄNDERUNG DES VERDICHTUNGSVERHÄLTNISSES EINES VERBRENNUNGSMOTORS UND VERFAHREN ZUR VERWENDUNG DER VORRICHTUNG

Title (fr)
DISPOSITIF DE VARIATION DU TAUX DE COMPRESSION D'UN MOTEUR A COMBUSTION INTERNE ET PROCEDE POUR UTILISER UN TEL DISPOSITIF

Publication
EP 1756405 B1 20101027 (FR)

Application
EP 04816459 A 20041221

Priority
• FR 2004003329 W 20041221
• FR 0315214 A 20031223

Abstract (en)
[origin: US2008022977A1] The invention relates to a device for varying a compression ratio in an internal combustion engine comprising at least one cylinder (10) provided with a combustion chamber (20), a movable element provided with a piston (14) which is translationally displaceable by means of a connecting rod (16) connectable thereto by an axis (24) and to the crank pin (34) of a crankshaft (36). Said piston moves between a top dead centre and a lower dead centre allowing a dead volume (40, 118) at the top dead centre of the piston. The inventive device also comprises a rotatable towed cam (42) which makes it possible to vary the compression ratio and means (32, 78 a, 78 b) for controlling the cam displacement. According to said invention, said control means comprises a fluid actuator (76) provided with a sliding block (54) arranged in a receiver (56) which is formed in a support (58) and limits two fluid chambers (75 a, 75 b) connected to at least one closed circuit (77; 78 a, 78 b).

IPC 8 full level
F02B 75/04 (2006.01); **F02D 15/02** (2006.01)

CPC (source: EP US)
F02B 75/045 (2013.01 - EP US); **F02B 75/047** (2013.01 - EP US); **F02D 15/02** (2013.01 - EP US)

Cited by
CN107763061A

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 MC NL PL PT RO SE SI SK TR

DOCDB simple family (publication)
US 2008022977 A1 20080131; US 7789050 B2 20100907; AT E486203 T1 20101115; DE 602004029823 D1 20101209;
EP 1756405 A1 20070228; EP 1756405 B1 20101027; FR 2864154 A1 20050624; FR 2864154 B1 20070907; WO 2005071242 A1 20050804

DOCDB simple family (application)
US 58427503 A 20031221; AT 04816459 T 20041221; DE 602004029823 T 20041221; EP 04816459 A 20041221; FR 0315214 A 20031223;
FR 2004003329 W 20041221