

Title (en)

FULLY VARIABLE MECHANICAL VALVE GEAR FOR A PISTON INTERNAL COMBUSTION ENGINE

Title (de)

VOLLVARIABLE MECHANISCHER VENTILTRIEB FÜR EINE KOLBENBRENNKRAFTMASCHINE

Title (fr)

MECANISME DE DISTRIBUTION MECANIQUE ENTIEREMENT VARIABLE POUR MOTEUR ALTERNATIF

Publication

EP 1348068 A1 20031001 (DE)

Application

EP 02703532 A 20020102

Priority

- DE 10100173 A 20010104
- EP 0200006 W 20020102

Abstract (en)

[origin: WO02053881A1] The invention relates to a mechanical valve gear that can be variably adjusted for at least one gas shuttle valve (1) in a piston internal combustion engine, said valve being provided with at least one closing spring (2). Said valve gear comprises a drive element (13) for generating a stroke motion that acts against the force of the closing spring (2) on the gas shuttle valve (1) and a stroke transmission element (4) located between the drive element (13) and the gas shuttle valve (1). Said transmission element acts on the gas shuttle valve (1) in the direction of the displacement axis (14) of the latter and the stroke path of the stroke transmission element can be modified in the direction of the displacement axis (14) by means of an adjustable guide element (11). The stroke transmission element consists of a pivoting element (8), whose end that acts in the direction of the displacement axis (14) interacts with the gas shuttle valve and whose end that faces away from the gas shuttle valve (1) is connected to the drive element (13). Said pivoting element can be directed in a pivoting manner back and forth on a guide element (11) that is configured as a radial cam (11.1).

IPC 1-7

F01L 13/00; F01L 1/12; F01L 9/04; F01L 1/10; F01L 1/26

IPC 8 full level

F01L 1/18 (2006.01); **F01L 1/10** (2006.01); **F01L 1/12** (2006.01); **F01L 1/26** (2006.01); **F01L 9/10** (2021.01); **F01L 9/20** (2021.01); **F01L 13/00** (2006.01); **F01L 9/22** (2021.01)

CPC (source: EP US)

F01L 1/10 (2013.01 - EP US); **F01L 1/12** (2013.01 - EP US); **F01L 1/185** (2013.01 - EP US); **F01L 1/26** (2013.01 - EP US); **F01L 9/10** (2021.01 - EP US); **F01L 9/20** (2021.01 - EP US); **F01L 9/22** (2021.01 - EP); **F01L 13/0021** (2013.01 - EP US); **F01L 13/0063** (2013.01 - EP US); **F01L 9/22** (2021.01 - US); **F01L 13/0005** (2013.01 - EP US); **F01L 2013/0068** (2013.01 - EP US); **F01L 2305/00** (2020.05 - EP US); **F01L 2820/00** (2013.01 - EP US)

Citation (search report)

See references of WO 02053881A1

Designated contracting state (EPC)

AT BE CH CY DE DK ES FI FR GB GR IE IT LI LU MC NL PT SE TR

DOCDB simple family (publication)

WO 02053881 A1 20020711; DE 10100173 A1 20020711; DE 10290017 D2 20031120; EP 1348068 A1 20031001; JP 2004520522 A 20040708; JP 3953954 B2 20070808; US 2004103865 A1 20040603; US 7040267 B2 20060509

DOCDB simple family (application)

EP 0200006 W 20020102; DE 10100173 A 20010104; DE 10290017 T 20020102; EP 02703532 A 20020102; JP 2002554366 A 20020102; US 61234503 A 20030703