

Title (en)

A VALVE TRAIN FOR OPERATING A CYLINDER VALVE ASSEMBLY FOR AN INTERNAL COMBUSTION ENGINE

Title (de)

EIN VENTILTRIEB FÜR DEN BETRIEB EINER ZYLINDERVENTILBAUGRUPPE EINER BRENNKRAFTMASCHINE

Title (fr)

UN TRAIN DE SOUPAPES POUR ACTIONNER UN ENSEMBLE DE VALVE DE CYLINDRE POUR UN MOTEUR À COMBUSTION INTERNE

Publication

EP 4086438 A1 20221109 (EN)

Application

EP 22171164 A 20220502

Priority

IT 202100011516 A 20210505

Abstract (en)

A valve train for operating a cylinder valve assembly for an internal combustion engine comprising a valve bridge (VB) including a casing (CS) wherein is slidably inserted a lost motion assembly (LMA), wherein the lost motion assembly includes an outer plunger (OP) having a longitudinal development (X) arranged to receive a main rocker arm action and to transmit such action to the valve bridge through a locking element (LE), wherein, said outer plunger (OP) includes an axial cavity (CV) where an inner plunger (IP) is suitable to slide in response of oil pressurization; the lost motion assembly being configured to define a clearance (CC) between a bottom portion (BP) of the casing and a bottom portion (BP1) of the outer plunger (OP) configured to receive pressurized oil and wherein said casing (CS) is provided of a passing through opening (MO) to discharge said pressurized oil in such a way to dump a sudden restriction of the clearance (CC) caused by lost motion activation.

IPC 8 full level

F01L 13/00 (2006.01); **F01L 1/12** (2006.01); **F01L 1/18** (2006.01); **F01L 1/46** (2006.01); **F01L 13/06** (2006.01)

CPC (source: EP)

F01L 1/12 (2013.01); **F01L 1/181** (2013.01); **F01L 13/0005** (2013.01); **F01L 13/06** (2013.01); **F01L 2001/467** (2013.01); **F01L 2810/02** (2013.01)

Citation (applicant)

US 2014251266 A1 20140911 - EMMONS KRISTIN V [US], et al

Citation (search report)

- [XA] US 9790824 B2 20171017 - BALTRUCKI JUSTIN [US], et al
- [XA] EP 2975230 B1 20180221 - JACOBS VEHICLE SYSTEMS INC [US]
- [XA] US 10851682 B2 20201201 - BALTRUCKI JUSTIN D [US]

Cited by

CN11756988A

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

Designated validation state (EPC)

KH MA MD TN

DOCDB simple family (publication)

EP 4086438 A1 20221109; IT 202100011516 A1 20221105

DOCDB simple family (application)

EP 22171164 A 20220502; IT 202100011516 A 20210505