

Title (en)

VARIABLE-LIFT VALVE TRAIN HAVING AT LEAST TWO WORKING POSITIONS

Title (de)

HUBVARIABLER VENTILTRIEB MIT WENIGSTENS ZWEI ARBEITSLAGEN

Title (fr)

MÉCANISME DE DISTRIBUTION À COURSE VARIABLE PRÉSENTANT AU MOINS DEUX POSITIONS DE TRAVAIL

Publication

**EP 3887656 A1 20211006 (DE)**

Application

**EP 19800987 A 20191106**

Priority

- DE 102018130428 A 20181130
- EP 2019080347 W 20191106

Abstract (en)

[origin: WO2020108933A1] The invention relates to a variable-lift valve train (1) for a gas exchange valve (2) of an internal combustion engine, having: a lift adjuster (4), in particular an intermediate lever, with a working curve (2) which can be arranged at least in a first working position (A1) for setting a partial lift (h<sub>mill</sub>) and in a second working position (A2) for setting a maximum lift (h<sub>max</sub>), the working curve having a maximum curvature (K<sub>max</sub>) in one region (BK<sub>max</sub>); a lift actuator (10), in particular a cam of a camshaft, which has an actuating contour (NK) for deflecting the lift adjuster; a lift lever (9), in particular a roller finger follower, which can be deflected by means of the working curve and thereby set a lift (h) of the gas exchange valve, wherein the working curve of the deflected lift adjuster can actuate the gas exchange valve when moved over a contact face of the lift lever. The invention also relates to a method for operating a variable-lift valve train (1).

IPC 8 full level

**F01L 13/00** (2006.01)

CPC (source: EP US)

**F01L 1/053** (2013.01 - US); **F01L 1/185** (2013.01 - US); **F01L 13/0005** (2013.01 - EP US); **F01L 13/0063** (2013.01 - EP US); **F02D 13/0226** (2013.01 - US); **F02D 13/023** (2013.01 - EP); **F02D 13/0269** (2013.01 - EP US); **F02D 41/1446** (2013.01 - EP US); **F01L 1/053** (2013.01 - EP); **F01L 1/185** (2013.01 - EP); **F01L 2013/0068** (2013.01 - EP US); **F01L 2305/00** (2020.05 - EP US); **Y02T 10/12** (2013.01 - EP)

Citation (search report)

See references of WO 2020108933A1

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 2020108933 A1 20200604**; CN 113039350 A 20210625; CN 113039350 B 20230228; DE 102018130428 A1 20200604; EP 3887656 A1 20211006; US 2022090523 A1 20220324

DOCDB simple family (application)

**EP 2019080347 W 20191106**; CN 201980067423 A 20191106; DE 102018130428 A 20181130; EP 19800987 A 20191106; US 201917295087 A 20191106