

Title (en)

Valve lift control for internal combustion engine

Title (de)

Ventilsteuerung zur Einstellung des Hubes von Ventilen in einer Brennkraftmaschine

Title (fr)

Contrôleur de levée de soupapes d'un moteur à combustion interne

Publication

**EP 1347154 A3 20031217 (DE)**

Application

**EP 03005576 A 20030312**

Priority

DE 10213081 A 20020320

Abstract (en)

[origin: EP1832723A2] The drive (12) has two rotors (16, 17) that are attached into a cylindrical stator (13). The rotors (16) are connected to an adjustable shaft (1) in a torque proof manner, and the rotor (17) sits on an axle (18), which lies in alignment with respect to the adjustable shaft that is to be connected. Torque proof cams are provided on the adjustable shaft, and blades are provided on an inner wall of the stator. The axis of the rotors and the stator coincide with each other.

IPC 1-7

**F01L 13/00; F01L 25/02; F02D 13/02; F02D 41/00; F01L 1/34; F01L 1/344**

IPC 8 full level

**F01L 1/344** (2006.01); **F01L 13/00** (2006.01)

CPC (source: EP US)

**F01L 13/0026** (2013.01 - EP US); **F01L 2001/34493** (2013.01 - EP US); **F01L 2305/00** (2020.05 - EP US); **F01L 2800/08** (2013.01 - EP US)

Citation (search report)

- [X] US 4858572 A 19890822 - SHIRAI EIJI [JP], et al
- [X] US 6024061 A 20000215 - ADACHI MICHIO [JP], et al
- [X] US 6311656 B1 20011106 - WATANABE MASAHIKO [JP]
- [X] US 6039015 A 20000321 - SATO ATSUSHI [BE]
- [X] US 5941203 A 19990824 - SATO ATSUSHI [JP]
- [X] DE 19614558 A1 19971016 - SCHAEFFLER WAELZLAGER KG [DE]
- [A] DE 4116196 A1 19921119 - BOSCH GMBH ROBERT [DE]
- [PA] EP 1234967 A2 20020828 - NISSAN MOTOR [JP]
- [PA] WO 02097244 A1 20021205 - BISHOP INNOVATION LTD [AU], et al

Cited by

DE102006012775B4; DE102006012733B4; EP2386729A1; DE102008033230B4; US7841311B2; US7836857B2; US9074498B2; WO2012136409A1; WO2007107428A2; US7946266B2; EP2415979A1; DE102010033296A1; US8677960B2; WO2007107428A3; WO2011141833A3; US7581527B2; DE102008023098A1; US8201528B2; DE102008033230A1

Designated contracting state (EPC)

AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IT LI LU MC NL PT SE SI SK TR

DOCDB simple family (publication)

**EP 1347154 A2 20030924; EP 1347154 A3 20031217; EP 1347154 B1 20080827**; AT E406504 T1 20080915; AT E459789 T1 20100315; DE 10213081 A1 20031002; DE 50310394 D1 20081009; DE 50312490 D1 20100415; EP 1832723 A2 20070912; EP 1832723 A3 20070926; EP 1832723 B1 20100303; ES 2312676 T3 20090301; US 2003177991 A1 20030925; US 6814036 B2 20041109

DOCDB simple family (application)

**EP 03005576 A 20030312**; AT 03005576 T 20030312; AT 07107909 T 20030312; DE 10213081 A 20020320; DE 50310394 T 20030312; DE 50312490 T 20030312; EP 07107909 A 20030312; ES 03005576 T 20030312; US 24917303 A 20030320