

Title (en)

A CONTROL ARRANGEMENT FOR AN INLET VALVE IN A PISTON ENGINE

Title (de)

BETÄTIGUNSVORRICHTUNG FÜR EIN EINLASSVENTIL IN EINER BRENNKRAFTMASCHINE

Title (fr)

MÉCANISME DE CONTRÔLE DE DISTRIBUTION POUR UNE SOUPAPE D'ADMISSION DANS UN MOTEUR À COMBUSTION INTERNE

Publication

**EP 2425104 B1 20140409 (EN)**

Application

**EP 10718624 A 20100409**

Priority

- FI 2010050285 W 20100409
- FI 20095462 A 20090427

Abstract (en)

[origin: WO2010125235A1] The invention relates to a control arrangement for an inlet valve in a piston engine adapted between a cam device (5) of a camshaft (4) of the engine (1) and an inlet valve mechanism (6) arranged to open and close the inlet valve (3) in association with a cylinder of the engine, which control arrangement (7) comprises a body part (8), in which a piston device (9) is movably arranged to be in force transmission connection with the camshaft (4) and the valve mechanism (6), said body part (8) and the piston device (9) together defining a first chamber (13), into which hydraulic medium can be selectively fed, and a second chamber (19) connected to the first chamber via duct means (18,18', 18''), the flow of hydraulic medium from the first chamber (13) to the second chamber (19) being controlled for providing a delay in the closing of the inlet valve (3). The body part (8) is provided with two or more flow ducts (18a,18b,18c;18'a,18'b;18''a,18''b,18''c) for arranging different routes for the flow of hydraulic medium from the first chamber (13) to the second chamber (19). Control means (17, 17', 17'') are provided for selecting the route of flow to be utilised in each case to provide different closing delay.

IPC 8 full level

**F01L 1/16** (2006.01); **F01L 1/14** (2006.01); **F01L 1/255** (2006.01); **F01L 9/14** (2021.01); **F01L 13/00** (2006.01)

CPC (source: EP FI KR)

**F01L 1/14** (2013.01 - KR); **F01L 1/146** (2013.01 - EP); **F01L 1/255** (2013.01 - EP KR); **F01L 9/10** (2021.01 - KR); **F01L 9/14** (2021.01 - EP); **F01L 13/08** (2013.01 - FI); **F01L 1/16** (2013.01 - EP); **F01L 2013/0089** (2013.01 - EP); **F01L 2305/00** (2020.05 - EP)

Cited by

CN107061007A

Designated contracting state (EPC)

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 SE SI SK SM TR

DOCDB simple family (publication)

**WO 2010125235 A1 20101104**; CN 102414402 A 20120411; CN 102414402 B 20140312; EP 2425104 A1 20120307; EP 2425104 B1 20140409; FI 121512 B 20101215; FI 20095462 A0 20090427; FI 20095462 A 20101028; KR 101628424 B1 20160608; KR 20120016068 A 20120222

DOCDB simple family (application)

**FI 2010050285 W 20100409**; CN 201080018262 A 20100409; EP 10718624 A 20100409; FI 20095462 A 20090427; KR 20117025211 A 20100409