

Title (en)
SYSTEM FOR ACTUATION OF AN INTAKE VALVE OF AN INTERNAL COMBUSTION ENGINE

Title (de)
SYSTEM ZUR BETÄTIGUNG EINES EINLASSVENTILS EINER BRENNKRAFTMASCHINE

Title (fr)
SYSTÈME POUR ACTIONNER UNE SOUPAPE D'ADMISSION D'UN MOTEUR À COMBUSTION INTERNE

Publication
EP 4074945 A1 20221019 (EN)

Application
EP 21168009 A 20210413

Priority
EP 21168009 A 20210413

Abstract (en)
An actuation system for actuating an intake valve associated with a cylinder of an internal combustion engine comprises a slave piston (21) that operates the intake valve (7) and that is hydraulically controlled by means of a volume of pressurized fluid (C) by a master piston (16) operated by a first cam (14A) of a camshaft (11). A control valve (24) controls the communication between the volume of pressurized fluid (C) and an environment at lower pressure to which a fluid accumulator is connected (270). The control valve (24) is mechanically controlled by a second cam (14B) that is carried by the camshaft (11) and that has the sole function of controlling the control valve (24).

IPC 8 full level
F01L 1/344 (2006.01); **F01L 9/12** (2021.01); **F01L 13/00** (2006.01); **F01L 13/06** (2006.01)

CPC (source: EP)
F01L 1/3442 (2013.01); **F01L 9/12** (2021.01); **F01L 13/0047** (2013.01); **F01L 13/06** (2013.01); **F01L 13/0005** (2013.01);
F01L 2001/0537 (2013.01); **F01L 2001/34426** (2013.01); **F01L 2001/34433** (2013.01); **F01L 2001/34483** (2013.01); **F01L 2001/34489** (2013.01);
F01L 2810/03 (2013.01); **F01L 2810/04** (2013.01)

Citation (applicant)

- EP 0803642 B1 20001115 - FIAT RICERCHE [IT]
- EP 1243761 A1 20020925 - FIAT RICERCHE [IT]
- EP 1555398 A1 20050720 - FIAT RICERCHE [IT]
- EP 1091097 A1 20010411 - FIAT RICERCHE [IT]
- EP 1344900 A2 20030917 - FIAT RICERCHE [IT]
- EP 1726790 A1 20061129 - FIAT RICERCHE [IT]
- EP 1635045 A1 20060315 - FIAT RICERCHE [IT]

Citation (search report)

- [I] EP 3181842 B1 20190619 - FIAT RICERCHE [IT]
- [I] US 2014318484 A1 20141030 - STUCCHI SERGIO [IT], et al
- [I] EP 2597276 B1 20140416 - FIAT RICERCHE [IT]
- [A] DE 102012214645 A1 20140220 - MAHLE INT GMBH [DE]

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)
EP 4074945 A1 20221019; EP 4074945 B1 20230531; WO 2022219440 A1 20221020

DOCDB simple family (application)
EP 21168009 A 20210413; IB 2022052884 W 20220329