

Title (en)
ENGINE VALVE DEVICE

Title (de)
MOTORVENTILVORRICHTUNG

Title (fr)
DISPOSITIF DE VANNE DE MOTEUR

Publication
EP 2039892 A4 20091104 (EN)

Application
EP 07767439 A 20070622

Priority
• JP 2007062630 W 20070622
• JP 2006182121 A 20060630

Abstract (en)
[origin: EP2039892A1] With the goal of providing an engine valve device, which can follow a high revolution of an engine and can be efficiently operated, although the engine valve device varies an open and close motion of a valve, an engine valve device includes an intake valve 3 which opens and closes an intake port by a pressing force of a rotating cam and a pressing force of a valve spring, a piston 23 which is movable in a same direction as the intake valve 3, a cylinder portion 22 which houses the piston 23 such that the piston 23 is movable inside, a hydraulic actuator 20 including the piston 23 and the cylinder portion 22, a supply discharge pipe line 21d which communicates with a pressure chamber formed by the piston 23 and the cylinder portion 22, an accumulator 50 which accumulates hydraulic oil flowed out from the pressure chamber via the supply discharge pipe line 21d, and an electromagnetic on-off valve 30 which controls a flow of the hydraulic oil between the pressure chamber and the accumulator 50. The electromagnetic on-off valve 30 is arranged on the supply discharge pipe line between the hydraulic actuator 20 and the accumulator 50.

IPC 8 full level
F01L 9/10 (2021.01); **F01L 13/06** (2006.01)

CPC (source: EP KR US)
F01L 1/146 (2013.01 - EP US); **F01L 1/181** (2013.01 - EP US); **F01L 9/10** (2021.01 - EP US); **F01L 13/0015** (2013.01 - EP US); **F01L 13/06** (2013.01 - EP US); **F01M 1/16** (2013.01 - KR); **F01L 1/20** (2013.01 - EP US); **F01L 1/267** (2013.01 - EP US); **F01L 2001/34426** (2013.01 - EP US); **F01L 2001/34446** (2013.01 - EP US); **F01L 2013/0089** (2013.01 - EP US); **F01L 2305/00** (2020.05 - EP US)

Citation (search report)
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Designated contracting state (EPC)
DE GB SE

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EP 2039892 A1 20090325; EP 2039892 A4 20091104; EP 2039892 B1 20120321; CN 101473111 A 20090701; CN 101473111 B 20110831; JP WO2008001699 A1 20091126; KR 101083613 B1 20111116; KR 20090027649 A 20090317; US 2009199796 A1 20090813; WO 2008001699 A1 20080103

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