Title (en)

INTERNAL COMBUSTION ENGINE

Title (de)

BRENNKRAFTMASCHINE

Title (fr)

MOTEUR À COMBUSTION INTERNE

Publication

EP 3055519 A1 20160817 (EN)

Application

EP 14787299 A 20141008

Priority

- JP 2013212794 A 20131010
- JP 2014005126 W 20141008

Abstract (en)

[origin: WO2015052930A1] An internal combustion engine includes: a plurality of cams that are used for driving a valve; a cam-switching type variable operated-valve structure that has a locker arm portion and a plurality of hydraulic linking structures, the locker arm portion having a plurality of oscillation portions that individually oscillate according to cam profiles of the cams and mediate power conducted from a camshaft having the cams to the valve, the plurality of linking structures performing linking and canceling the linking between two of the plurality of oscillation portions with a lock member, the variable operated-valve structure selecting a usage cam that is used for driving the valve from the cams; and a determination unit that determines at least one of a condition of the lock member and a switching phase of the usage cam according to the condition of the lock member based on changing of a hydraulic pressure according to the switching of the usage cam.

IPC 8 full level

F01L 1/26 (2006.01); F01L 13/00 (2006.01)

CPC (source: EP)

F01L 1/267 (2013.01); F01L 13/0036 (2013.01)

Citation (search report)

See references of WO 2015052930A1

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 2015052930 A1 20150416; EP 3055519 A1 20160817; EP 3055519 B1 20170712; JP 2015075053 A 20150420; JP 6237091 B2 20171129

DOCDB simple family (application)

JP 2014005126 W 20141008; EP 14787299 A 20141008; JP 2013212794 A 20131010