

Title (en)
ENGINE SYSTEM AND VEHICLE

Title (de)
MOTORSYSTEM UND FAHRZEUG

Title (fr)
SYSTÈME MOTEUR ET VÉHICULE

Publication
EP 3309376 A4 20180704 (EN)

Application
EP 16811168 A 20160415

Priority
• JP 2015120450 A 20150615
• JP 2016002057 W 20160415

Abstract (en)
[origin: EP3309376A1] A camshaft rotates in forward and reverse directions in conjunction with a rotation of a crankshaft in the forward and reverse directions. An intake cam and a sub-intake cam are provided at the camshaft. The intake cam acts on an intake valve within a range of a crank angle corresponding to an intake process by integrally rotating with the camshaft. The sub-intake cam is rotatable within a constant angular range with respect to the camshaft, thereby being movable between a normal position and a start-up position in a circumferential direction of the camshaft. During the rotation of the crankshaft in the reverse direction, the sub-intake moves to the start-up position by rotating with a delay relative to the intake cam.

IPC 8 full level
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Citation (search report)
• [XAI] EP 2881565 A1 20150610 - YAMAHA MOTOR CO LTD [JP]
• [XAI] EP 2719883 A1 20140416 - YAMAHA MOTOR CO LTD [JP]
• [A] JP S62195608 U 19871212
• See references of WO 2016203687A1

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

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BA ME

DOCDB simple family (publication)
EP 3309376 A1 20180418; **EP 3309376 A4 20180704**; TW 201643311 A 20161216; TW I589772 B 20170701; WO 2016203687 A1 20161222

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