

Title (en)
VALVE TRAIN DEVICE

Title (de)
VENTILTRIEBVORRICHTUNG

Title (fr)
DISPOSITIF DE COMMANDE DE SOUPAPE

Publication
EP 2331795 B1 20130529 (DE)

Application
EP 09778450 A 20090910

Priority
• EP 2009006569 W 20090910
• DE 102008050776 A 20081008

Abstract (en)
[origin: WO2010040439A1] The invention relates to a valve train device, particularly of an internal combustion engine of a motor vehicle, having a phase adjustment device (10a; 10b; 10c; 10d) for adjusting phasing between at least one primary cam (11a-18a; 11b-18b; 11c, 13c-18c; 11d-18d) and at least one secondary cam (19a-26a; 19b-26b; 19c-27c; 19d-26d) belonging to the same category and/or disposed coaxially to each other, and of which at least one is associated with a pair of cams (28a-35a; 28b-35b; 28c-35c; 28d-35d) providing a valve lift changeover.

IPC 8 full level
F01L 1/344 (2006.01); **F01L 1/34** (2006.01); **F01L 13/00** (2006.01)

CPC (source: EP US)
F01L 1/34 (2013.01 - EP US); **F01L 1/34413** (2013.01 - EP US); **F01L 13/0042** (2013.01 - EP US); **F01L 2013/0052** (2013.01 - EP US)

Cited by
DE102015122051A1

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)
DE 102008050776 A1 20100415; CN 102177316 A 20110907; EP 2331795 A1 20110615; EP 2331795 B1 20130529;
JP 2012505333 A 20120301; US 2011203541 A1 20110825; US 8960143 B2 20150224; WO 2010040439 A1 20100415

DOCDB simple family (application)
DE 102008050776 A 20081008; CN 200980139845 A 20090910; EP 09778450 A 20090910; EP 2009006569 W 20090910;
JP 2011530385 A 20090910; US 201113066167 A 20110407