

Title (en)
Camshaft phaser

Title (de)
Nockenwellenversteller

Title (fr)
Déphaseur d'arbre à cames

Publication
EP 1596040 A3 20080827 (DE)

Application
EP 05005812 A 20050317

Priority
DE 102004023976 A 20040514

Abstract (en)
[origin: EP1596040A2] The plate has a drive wheel (2), propelled by a crankshaft. A cam shaft-firm drive output (3) is connected to the cam shaft. The drive wheel is propelled over a hydraulic control drive. The control drive is from a pair of hydraulic pressure chambers working against each other (12, 13). The pressure chambers are arranged over a distributor (14). The cam shaft together with a cylinder head construction unit (55) has a cam shaft axial-thrust bearing.

IPC 8 full level
F01L 1/04 (2006.01); **F01L 1/344** (2006.01); **F01L 1/34** (2006.01); **F01L 9/10** (2021.01)

CPC (source: EP KR US)
F01L 1/34 (2013.01 - EP US); **F01L 1/3442** (2013.01 - EP US); **F01L 9/00** (2013.01 - KR); **F01L 13/00** (2013.01 - KR); **F01L 2001/0475** (2013.01 - EP US); **F01L 2001/34433** (2013.01 - EP US)

Citation (search report)

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Designated contracting state (EPC)
AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IS IT LI LT LU MC NL PL PT RO SE SI SK TR

Designated extension state (EPC)
AL BA HR LV MK YU

DOCDB simple family (publication)
EP 1596040 A2 20051116; EP 1596040 A3 20080827; EP 1596040 B1 20101013; CN 1696475 A 20051116; CN 1696475 B 20110105; CN 1696476 A 20051116; CN 1696476 B 20110608; DE 502005010369 D1 20101125; JP 2005325836 A 20051124; JP 4563859 B2 20101013; KR 101179420 B1 20120903; KR 20060047845 A 20060518; US 2005252467 A1 20051117; US 2007204824 A1 20070906; US 7243626 B2 20070717; US 7597076 B2 20091006

DOCDB simple family (application)
EP 05005812 A 20050317; CN 200510071251 A 20050513; CN 200510072657 A 20050516; DE 502005010369 T 20050317; JP 2005121292 A 20050419; KR 20050039929 A 20050513; US 12484105 A 20050509; US 74731207 A 20070511