

Title (en)

Cylinder head structure of a direct-injection diesel engine and a direct injection diesel engine

Title (de)

Zylinderkopfstruktur eines Dieselmotors mit Direkteinspritzung und ein Dieselmotor mit Direkteinspritzung

Title (fr)

Structure d'une culasse pour un moteur Diesel à injection directe et un moteur Diesel à injection directe

Publication

EP 1457657 A3 20060329 (EN)

Application

EP 04005616 A 20040309

Priority

JP 2003062891 A 20030310

Abstract (en)

[origin: EP1457657A2] A cam holder 31, constructed separately from a cylinder head 10, for supporting an intake and exhaust camshaft 26 is mounted on a middle deck of the cylinder head 10. At end pivots 27 of each swing arm 25 located at both the right and left ends when viewed from the front of the engine, mechanical lash adjuster mechanisms are provided, respectively. The height of a peripheral wall at both the right and left sides adjacent to the end pivots 27 is located lower than a mating surface between a cam journal 33 and a cam cal 34 of the cam holder 31.

IPC 8 full level

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CPC (source: EP)

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Citation (search report)

- [DY] EP 1094213 A2 20010425 - HYUNDAI MOTOR CO LTD [KR]
- [Y] EP 0967370 A2 19991229 - YAMAHA MOTOR CO LTD [JP]
- [Y] US 5207197 A 19930504 - KLINGMANN ROLF [DE], et al
- [Y] US 2002046744 A1 20020425 - SUGANAMI TOMOJI [JP], et al
- [Y] EP 1134402 A2 20010919 - MAZDA MOTOR [JP]
- [A] US 5711266 A 19980127 - ASTNER JOSEF [DE], et al

Cited by

US7757646B2; DE102006056043A1; EP3144518A1; FR3041386A1; CN110566361A; EP3686403A1; WO2007083223A1

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