

Title (en)

ROCKER ASSEMBLY HAVING IMPROVED DURABILITY

Title (de)

SCHWINGHEBELANORDNUNG MIT VERBESSERTER BESTÄNDIGKEIT

Title (fr)

ENSEMble BRAS BASCULANT AYANT UNE DURABILITÉ AMÉLIORÉE

Publication

EP 2839124 A4 20160316 (EN)

Application

EP 13777728 A 20130422

Priority

- US 201261636277 P 20120420
- US 201261637786 P 20120424
- US 201261640709 P 20120430
- US 201261640713 P 20120430
- US 201361771769 P 20130301
- US 2013037665 W 20130422

Abstract (en)

[origin: WO2013159120A1] A durable system is disclosed for controlling variable valve actuation of an engine valve corresponding to a cylinder of an automobile engine. The system is designed to have a durability that exceeds the expected life of a conventional automobile engine. The system includes first crowned cam having a first lift profile, a second crowned cam having a second lift profile, and a rocker arm assembly. The rocker assembly includes a first arm having an end connected to said engine valve, having a high impact roller following the first crowned cam operating the engine valves according to a first lift profile. The rocker arm assembly also includes a second arm having slider pads riding on the second crowned cam to operate said engine valve according to a second lift profile. The slider pads have a sliding surface covered with an impact-resistant multilayer coating with its outermost coating being a wear-resistant coating. A latch having adjustable latch lash secures the second arm relative to the first arm when in a latched position causing the valve to operate according to a second lift profile when the latch is in a latched position, and the valve is operated according to a first lift profile when the latch is not in a latched position.

IPC 8 full level

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CPC (source: CN EP)

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F01L 2820/045 (2013.01 - CN EP); **Y02T 10/12** (2013.01 - CN EP)

Citation (search report)

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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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CN 104603406 B 20160928; CN 106285812 A 20170104; CN 106285812 B 20190903; CN 106762009 A 20170531; CN 106762009 B 20200417;
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JP 2015507254 A 20130422; JP 2015507255 A 20130422; JP 2017005329 A 20170116; JP 2018065061 A 20180329;
KR 20147032445 A 20130422; KR 20147032451 A 20130422; US 2013037667 W 20130422