

Title (en)

Two-step roller finger cam follower

Title (de)

Zweistufen-Rollenkurvenschlepphebel

Title (fr)

Suiveur de came de contact à rouleau à deux étapes

Publication

EP 1992795 A2 20081119 (EN)

Application

EP 08154624 A 20080416

Priority

US 80391007 A 20070516

Abstract (en)

A two-step roller finger follower assembly for shifting between high-lift and low-lift valve modes in a valve train of an internal combustion engine includes a body having side members defining coaxially disposed shaft orifices, a pallet end, a socket end, a slider arm aperture, and a latch pin channel. The socket end is mountable to a hydraulic lash adjuster, and the pallet end is matable with a valve stem. A slider arm for engaging a high-lift cam lobe is disposed in the aperture, is pivotably mounted to a rotatable cross-shaft extending through the shaft orifices, and includes a slider tip for selectively engaging a latch pin to latch or unlatch the slider arm from the body. Dual rollers on the cross-shaft follow dual low-lift cam lobes. Preferably, the slider arm has a compound radial surface to provide compound lost motion of the slider arm, thereby minimizing rotational inertia.

IPC 8 full level

F01L 1/18 (2006.01); **F01L 13/00** (2006.01)

CPC (source: EP US)

F01L 1/18 (2013.01 - EP US); **F01L 1/182** (2013.01 - EP US); **F01L 1/185** (2013.01 - EP US); **F01L 13/0005** (2013.01 - EP US); **F01L 13/0036** (2013.01 - EP US); **F01L 2001/186** (2013.01 - EP); **F01L 2305/00** (2020.05 - EP US)

Citation (applicant)

- US 6755167 B2 20040629 - KRIEG JOHN J [US], et al
- US 2006249110 A1 20061109 - FERNANDEZ HERMES A [US], et al
- US 6925978 B1 20050809 - GERZSENY JOSEPH C [US], et al
- WO 2007035673 A2 20070329 - TIMKEN US CORP [US], et al

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 MT NL NO PL PT RO SE SI SK TR

Designated extension state (EPC)

AL BA MK RS

DOCDB simple family (publication)

EP 1992795 A2 20081119; **EP 1992795 A3 20100324**; US 2008283003 A1 20081120

DOCDB simple family (application)

EP 08154624 A 20080416; US 80391007 A 20070516