

Title (en)
Valve actuating mechanism

Title (de)
Ventilbetätigungsmechanismus

Title (fr)
Mécanisme d'actionnement de soupape

Publication
EP 1857642 A1 20071121 (EN)

Application
EP 07106858 A 20070424

Priority
GB 0609935 A 20060519

Abstract (en)
A mechanism for actuating an engine poppet valve includes two rotatable cams, a first rocker (12) mounted on a pivot shaft (36) and acting between a first of the two cams and the stem of the valve, and a second rocker (14) mounted for rotation about a fixed axis (34) and acting between the second of the two cams and the pivot shaft (36) of the first rocker to raise and lower the pivot axis of the first rocker cyclically in synchronism with the rotation of the second cam, whereby the valve (10) is operated in dependence upon the instantaneous sum of the lifts of the two cams. In the invention, an element (50) of the valve actuating mechanism transmitting force from one of the cams to the valve stem is formed in two parts, one part (55) movable by the associated cam and the other (52) transmitting force to the valve stem, and a latching mechanism (58) is provided for selectively locking the two parts of the element for movement in unison with one another and disconnecting the two parts of the element from one another to inhibit transmission of force from the associated cam to the valve stem. The latching mechanism is such that a change of state from locked to disconnected and vice versa can only take place when at least one of the two rockers is at or near the base circle of the associated cam and the change of state is initiated by the movement of the rocker system whilst the poppet valve is closed.

IPC 8 full level
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