

Title (en)
Valve opening mechanism

Title (de)
Ventil-Öffnungsmechanismus

Title (fr)
Mécanisme d'ouverture d'une soupape

Publication
EP 1462643 A1 20040929 (DE)

Application
EP 03006733 A 20030325

Priority
EP 03006733 A 20030325

Abstract (en)
The motor drive system has a drive shaft (10) with a disk (12) holding a first pin (18) with a groove (30) near its tip. The first end of a spring (32) engages in this groove. The spring is coiled around a bearing pin (14) and its second end engages on a pin (34) on a drive crank (16). The drive crank has a central aperture (24) accommodating the bearing pin. The first pin protrudes through an arcuate slot (28) allowing up to 70 degrees of relative movement. The end of the crank (20) has a bearing pin (36) engaging the first end of a connecting rod (22). The second end engages a pin (44) on a crank (46) on the valve shaft.

Abstract (de)
Ein Ventil-Öffnungsmechanismus weist einen Motor mit einer sich drehenden Motorwelle, ein Drehteil (10), das mit der Motorwelle verbunden ist und ein Betätigungsteil (16) auf, das drehbar und exzentrisch an dem Drehteil (10) gelagert ist und federnd mit diesem verbunden ist. <IMAGE>

IPC 1-7
F02M 25/07

IPC 8 full level
F02M 25/07 (2006.01)

CPC (source: EP)
F02M 26/54 (2016.02)

Citation (applicant)
EP 1199463 A2 20020424 - SIEBE AUTOMOTIVE DEUTSCHLAND GMBH [DE]

Citation (search report)
• [X] EP 0856657 A2 19980805 - WAHLER GMBH & CO GUSTAV [DE]
• [X] US 4840350 A 19890620 - COOK JOHN E [CA]
• [X] EP 1028249 A2 20000816 - EATON CORP [US]
• [A] EP 0900930 A2 19990310 - GEN MOTORS CORP [US]
• [DA] EP 1199463 A2 20020424 - SIEBE AUTOMOTIVE DEUTSCHLAND GMBH [DE]

Cited by
DE102007053294B4; EP2025910A1; DE102006048616B4; EP1640593A1; DE102007053294A1; FR3033383A1; CN105937645A;
DE102012017705A1; CN104704276A; DE102006028488A1; DE102006028488B4; EP3070318A1; DE102015205129A1; DE102012017705B4;
DE102017221356B4; US7182315B2; US8353274B2; EP1544449A1

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

DOCDB simple family (publication)
EP 1462643 A1 20040929

DOCDB simple family (application)
EP 03006733 A 20030325