Title (en)

Valve unit

Title (de)

Klappeneinheit

Title (fr)

Unité de vanne

Publication

EP 1443203 A3 20070905 (EN)

Application

EP 03103209 A 20030821

Priority

GB 0302020 A 20030129

Abstract (en)

[origin: EP1443203A2] A valve unit, in particular an EGR valve unit, comprises a converting mechanism for converting the rotary movement of a drive shaft (28) in a linear movement for actuating a slideable actuating shaft (20) attached a valve closing member (18). The converting mechanism comprises a driving member (32), an actuating member (34) and a supporting member (36). The actuating member (34) is connected to the driving member (32) by a first, revolute joint (B) and the actuating member (34) is connected to the supporting member (36) by a second, revolute joint (C). The driving member (34) is coupled to the drive shaft (28) by a third joint (A) and the supporting member (36) is pivotally mounted onto the valve body (12) by a fourth joint (D). The actuating member (34) comprises a fifth joint (E) by means of which an axial actuating force is transmitted to the actuating shaft (20). The the positions of the joints (A; B; C; D; E) are selected in such a way that, for the operating angle range of the drive shaft (28), the fifth joint (E) remains substantially aligned with the actuating shaft (20).

IPC 8 full level

F02M 25/07 (2006.01)

CPC (source: EP)

F02M 26/54 (2016.02)

Citation (search report)

- [X] US 4213377 A 19800722 HEDGER JOHN H [US]
- [A] EP 1028249 A2 20000816 EATON CORP [US]
- [A] WO 0183975 A1 20011108 COOPERSTANDARD AUTOMOTIVE FLUI [US], et al
- [A] EP 0533546 A1 19930324 LABINAL [FR]

Cited by

KR102196742B1

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

Designated extension state (EPC)

AL LT LV MK

DOCDB simple family (publication)

EP 1443203 A2 20040804; EP 1443203 A3 20070905; GB 0302020 D0 20030226

DOCDB simple family (application)

EP 03103209 A 20030821; GB 0302020 A 20030129