

Title (en)
DRAG LEVER OF A VALVE MECHANISM IN AN INTERNAL COMBUSTION ENGINE

Title (de)
SCHLEPPHEBEL EINES VENTILTRIEBS EINER BRENNKRAFTMASCHINE

Title (fr)
LEVIER D'ENTRAINEMENT D'UN MECANISME DE DISTRIBUTION D'UN MOTEUR A COMBUSTION INTERNE

Publication
EP 1446562 A1 20040818 (DE)

Application
EP 02802982 A 20021022

Priority
• DE 10155825 A 20011114
• EP 0211774 W 20021022
• US 33562401 P 20011115

Abstract (en)
[origin: WO03042510A1] Disclosed is a drag lever (1) of a valve mechanism in an internal combustion engine, which can be shifted between various valve lifts for at least one gas exchange valve, comprising an outer lever (2) between whose arms (3a, 3b) an inner lever (6), which is pivotally moveable in relation thereto, is positioned, and both arms (2, 6) are coupled to each other by coupling means (15) in such a way that a large valve lift is generated during coupling and a smaller valve lift is generated during decoupling. The drag lever (1) is provided with a system (8) for a gas exchange valve on one end (7) thereof and is provided with a complementary surface, on the opposite end (4), for a support element, in addition to a run-on surface (14) for a cam. According to the invention, the outer lever is configured for transmission of a large cam pitch and the inner lever (6) is configured for transmission of a smaller cam pitch. The inner lever (6) is exclusively provided with a rotatable roller as a run-on surface (14) and a sliding caliper is provided as a run-off surface on each of the arms (3a, 3b) of the outer lever (2). A shiftable drag lever (1) is created, wherein only the lift part is provided with a roller as a run-on surface (14) for a cam, which lift part is predominantly shifted during operation of the internal combustion engine, being the inner lever (6) in said case.

IPC 1-7
F01L 13/00; **F01L 1/18**; **F01L 1/26**

IPC 8 full level
F01L 1/18 (2006.01); **F01L 13/00** (2006.01)

CPC (source: EP)
F01L 1/182 (2013.01); **F01L 1/185** (2013.01); **F01L 13/0015** (2013.01); **F01L 2305/00** (2020.05)

Citation (search report)
See references of WO 03042510A1

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

DOCDB simple family (publication)
WO 03042510 A1 20030522; BR 0206425 A 20031230; EP 1446562 A1 20040818

DOCDB simple family (application)
EP 0211774 W 20021022; BR 0206425 A 20021022; EP 02802982 A 20021022