

Title (en)
Valve control for internal-combustion engines.

Title (de)
Ventilsteuerung für Verbrennungskraftmaschinen.

Title (fr)
Commande de soupapes pour moteur à combustion interne.

Publication
EP 0197914 A1 19861015 (DE)

Application
EP 86890051 A 19860310

Priority
AT 79585 A 19850318

Abstract (en)
1. Valve control for internal combustion engines with at least one cylinder row, which includes four valves arranged mutually inclined for each cylinder, namely for each two inlet valves and two exhaust valves lying opposite to one another, wherein the planes determined by the axes of the opposed valves are rotated about the cylinder axes through an angle of 15-30 degrees with respect to the longitudinal centre plane of the internal combustion engine or to the transverse planes running through the cylinder axes, and in which there is provided for each a cam shaft on one side of the longitudinal centre plane of the internal combustion engine, which is arranged in the plane of the valves of like function operated thereby, characterised in that the valves (3, 4) arranged on each side of the longitudinal centre plane of the internal combustion engine have associated therewith on each side of this longitudinal centre plane two cam shafts (9, 10) operating them, in that each of the four cam shafts (9, 10) is arranged in one each of the valve rows (I, II, III, IV) formed by the valves (3, 4) of like function operated thereby and the planes formed by their valve stems (3', 4'), and in that the cams (11) of the cam shafts (9, 10) are conically formed and act on the cup tappets (7) operating the valves (3, 4).

Abstract (de)
Beschrieben wird eine Ventilsteuerung für eine Verbrennungskraftmaschine (1) mit wenigstens einer Zylinderreihe, die je Zylinder vier zueinander geneigt angeordnete Ventile (3, 4) enthält, nämlich jeweils einander gegenüberliegend zwei Ein- (3) und zwei Auslaßventile (4), wobei die von den Achsen der sich gegenüberliegenden Ventile bestimmten Ebenen gegenüber der Längsmittlebene bzw. den durch die Zylinderachsen laufenden Querebenen um die Zylinderachsen verdreht sind. Auf jeder Seite der Längsmittlebene sind zur Betätigung der Ventile (3, 4) zwei Nockenwellen (9, 10) vorgesehen, die jeweils in der durch die Ventile (3, 4) gleicher Funktion gebildeten Ventilreihe (I, II, III, IV) und den Ventilschäften (3', 4') gebildeten Ebenen angeordnet sind.

IPC 1-7
F01L 1/26

IPC 8 full level
F01L 1/26 (2006.01); **F02B 1/04** (2006.01); **F02F 1/24** (2006.01); **F02F 1/42** (2006.01)

CPC (source: EP)
F01L 1/262 (2013.01); **F02B 1/04** (2013.01); **F02B 2275/18** (2013.01); **F02F 1/4214** (2013.01); **F02F 2001/246** (2013.01)

Citation (search report)
• [Y] EP 0117850 A1 19840905 - ANFUSIO MARIO
• [Y] GB 1152805 A 19690521 - BAYERISCHE MOTOREN WERKE AG [DE]
• [AD] GB 375459 A 19320630 - FRANK ALBERT GEORGE BUTTERS
• [AP] EP 0155261 A2 19850918 - BOMBARDIER ROTAX GMBH [AT]

Cited by
EP0235121A1; FR2740171A1; US4942857A

Designated contracting state (EPC)
DE FR GB IT

DOCDB simple family (publication)
EP 0197914 A1 19861015; EP 0197914 B1 19880525; AT 399021 B 19950327; AT A79585 A 19940715; DE 3660224 D1 19880630

DOCDB simple family (application)
EP 86890051 A 19860310; AT 79585 A 19850318; DE 3660224 T 19860310