

Title (en)

ELECTRO-HYDRAULIC ADJUSTING DEVICE

Title (de)

ELEKTROHYDRAULISCHE STELLEINRICHTUNG

Title (fr)

DISPOSITIF ELECTROHYDRAULIQUE DE POSITIONNEMENT

Publication

**EP 0653014 B1 19960515 (DE)**

Application

**EP 93914613 A 19930708**

Priority

- DE 9300608 W 19930708
- DE 4224653 A 19920725

Abstract (en)

[origin: DE4224653A1] The electro-hydraulic adjusting device for actuating a device for moving at least one camshaft of an internal combustion engine in relation to its crankshaft has two differential pistons (42, 12), each of which serves to move a camshaft (inlet or outlet). A pump applies pressure to the small effective piston area (14, 40) of the two differential pistons (42, 12). To the pressure chambers (11, 44) at the larger effective piston area is allocated an independent pressure control valve (21, 46; 60) via which the pressure in said pressure chamber can be controlled independently of the other differential piston.

IPC 1-7

**F01L 1/34**; **F15B 11/16**; **F15B 11/22**

IPC 8 full level

**F01L 1/34** (2006.01); **F02D 13/02** (2006.01); **F15B 11/16** (2006.01); **F15B 11/22** (2006.01)

CPC (source: EP)

**F01L 1/34** (2013.01)

Designated contracting state (EPC)

DE FR IT

DOCDB simple family (publication)

**DE 4224653 A1 19940127**; DE 59302622 D1 19960620; EP 0653014 A1 19950517; EP 0653014 B1 19960515; JP H08500165 A 19960109; WO 9402715 A1 19940203

DOCDB simple family (application)

**DE 4224653 A 19920725**; DE 59302622 T 19930708; DE 9300608 W 19930708; EP 93914613 A 19930708; JP 50389194 A 19930708