

Title (en)  
HIGHLY DYNAMIC VALVE SERVOCONTROL DEVICE

Title (de)  
HOCHDYNAMISCHE SERVO-VENTILSTEUERVORRICHTUNG

Title (fr)  
DISPOSITIF DE SERVOCOMMANDE HAUTEMENT DYNAMIQUE A SOUPAPES

Publication  
**EP 1537337 B1 20060614 (DE)**

Application  
**EP 03807769 A 20030801**

Priority  
• DE 10241977 A 20020911  
• EP 0308550 W 20030801

Abstract (en)  
[origin: DE10241977A1] The sleeve (3) has valve control edges (5) connecting ducts (14) with those of the slider (4) and is axially moveable in a housing (2) by the action of a piezoelectric generator (11) and return spring (20) as the slider is moved by pressure through ducts (12). Absolute Hall effect (9) and relative eddy current (7) sensors establish the exact position (6) of the slider relative to the sleeve and the sleeve (8) to the housing.

IPC 8 full level  
**F15B 13/04** (2006.01); **F16K 31/124** (2006.01); **F16K 31/02** (2006.01)

CPC (source: EP US)  
**F15B 13/0402** (2013.01 - EP US); **Y10T 137/8242** (2015.04 - EP US); **Y10T 137/8663** (2015.04 - EP US); **Y10T 137/8671** (2015.04 - EP US)

Designated contracting state (EPC)  
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DOCDB simple family (publication)  
**DE 10241977 A1 20040401**; **DE 10241977 B4 20060126**; AU 2003250203 A1 20040504; DE 50303863 D1 20060727; EP 1537337 A1 20050608; EP 1537337 B1 20060614; JP 2005538331 A 20051215; JP 4198115 B2 20081217; US 2007079879 A1 20070412; US 7721758 B2 20100525; WO 2004033921 A1 20040422

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**DE 10241977 A 20020911**; AU 2003250203 A 20030801; DE 50303863 T 20030801; EP 0308550 W 20030801; EP 03807769 A 20030801; JP 2004542282 A 20030801; US 52720403 A 20030801