

Title (en)
Piezoelectric control valve.

Title (de)
Piezo-elektrisches Steuerventil.

Title (fr)
Soupape de commande piézo-électrique.

Publication
EP 0012743 A1 19800625 (EN)

Application
EP 79930028 A 19791120

Priority
US 97076478 A 19781218

Abstract (en)
A piezoelectric fluid control valve comprises a jet pipe (14) whose position in one axis is controlled by a piezoelectric actuator (22) mechanically connected to the jet pipe (14). The fluid output from the jet pipe nozzle (16) is normally positioned between a pair of control ports (28, 30) whereby fluid divides evenly between the ports. Energization of the piezoelectric actuator (22) by applying a voltage thereto moves the jet pipe (14) thereby increasing the pressure at one port and decreasing the pressure at the other port.

IPC 1-7
F15C 3/12; **F15B 13/02**; **G05D 17/02**

IPC 8 full level
F15B 13/043 (2006.01); **F15B 13/044** (2006.01)

CPC (source: EP)
F15B 13/0436 (2013.01)

Citation (search report)

- US 3286719 A 19661122 - MYERS RICHARD H
- GB 1205746 A 19700916 - DUNLOP CO LTD [GB]
- US 3939857 A 19760224 - BERNAERTS HENRY J
- DE 2511752 A1 19761007 - VER FLUGTECHNISCHE WERKE
- MACHINE DESIGN, Vol. 43, No. 2, January 21, 1971, Cleveland US "Flapping crystal generates fluidic signals", page 93. * Entirely *

Cited by
US10662801B2; GB2161957A; EP0504465A1; AT380934B; EP3321516A1; US2017051629A1; EP3242041A1; FR3051026A1; US10651364B2; EP3412921A1; WO03071132A3; US10544870B2; EP3133297B1; US7061161B2; US7282837B2; US7358649B2; US7417359B2; US10598297B2

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