

Title (en)  
PUMP CONTROL DEVICE

Publication  
**EP 0011339 A3 19801112 (FR)**

Application  
**EP 79200655 A 19791108**

Priority  
BE 191850 A 19781121

Abstract (en)  
[origin: US4439110A] A device for controlling the performance of pumps, having a constant volume such as pneumatic pumps having a constant volume, comprises liquid level detectors, such as magnetic microswitches that cooperate with a magnetized float, and the detectors are adapted to control the filling and delivery operation of pumped liquid into and out of a pump body. The device may comprise three or more liquid level detectors and a timing device for the filling and/or delivery operation of the pump, at least one of said detectors being adapted to control said timing device and the other liquid level detectors being adapted to control the filling and delivery operation itself.

IPC 1-7  
**G05D 9/12**; **F04F 1/06**; **G01F 23/12**

IPC 8 full level  
**F04F 1/06** (2006.01); **G05D 7/06** (2006.01)

CPC (source: EP US)  
**F04F 1/06** (2013.01 - EP US)

Citation (search report)  
• FR 2219401 A1 19761203 - GOETZELMANN IND ABWASSER [DE]  
• DE 2345413 A1 19750320 - TUCHENHAGEN OTTO  
• CH 533874 A 19730215 - APAW SA [CH]  
• FR 2342483 A2 19770923 - KUEBLER IMPULSGERAETE [DE]  
• DE 2702736 A1 19780727 - B W CONTROLS INC

Cited by  
US5498605A

Designated contracting state (EPC)  
AT CH DE FR GB IT LU NL SE

DOCDB simple family (publication)  
**US 4439110 A 19840327**; AT E3912 T1 19830715; DE 2965758 D1 19830728; EP 0011339 A2 19800528; EP 0011339 A3 19801112; EP 0011339 B1 19830622

DOCDB simple family (application)  
**US 35548782 A 19820308**; AT 79200655 T 19791108; DE 2965758 T 19791108; EP 79200655 A 19791108