

Title (en)

CONTROL UNIT FOR CONTROLLING THE BUILD-UP OF PRESSURE IN A PUMP UNIT

Title (de)

STEUEREINHEIT ZUR STEUERUNG DES DRUCKAUFBAUS IN EINER PUMPENEINHEIT

Title (fr)

UNITE SERVANT A COMMANDER L'ETABLISSEMENT DE LA PRESSION DANS UNE UNITE DE POMPAGE

Publication

**EP 1045975 A1 20001025 (DE)**

Application

**EP 99952396 A 19990817**

Priority

- DE 9902544 W 19990817
- DE 19837332 A 19980818

Abstract (en)

[origin: DE19837332A1] The control unit has a control valve (1) and a valve actuation unit connected to the control valve. The control valve is formed as an I valve open inwardly in the flow direction. The I valve has a valve body (3) axially movably mounted in a housing (2) of the control unit. When the control valve is closed, the valve body sits on a valve seat (4) of the control valve. The unit also has a throttle arrangement (7) for regulating the flow through the control valve when the control valve is opened with a small stroke. Independent claims also cover a method of controlling the pressure.

IPC 1-7

**F02M 59/36; F02M 45/06**

IPC 8 full level

**F02M 45/06** (2006.01); **F02M 51/00** (2006.01); **F02M 59/36** (2006.01); **F02M 59/46** (2006.01); **F04B 49/22** (2006.01); **F04B 53/10** (2006.01)

CPC (source: EP KR US)

**F02M 45/06** (2013.01 - EP US); **F02M 59/366** (2013.01 - EP US); **F02M 59/46** (2013.01 - KR); **F04B 49/225** (2013.01 - EP US);  
**F04B 53/1022** (2013.01 - EP US); **F04B 2205/172** (2013.01 - EP US)

Citation (search report)

See references of WO 0011339A1

Cited by

GB2357812A; GB2357812B

Designated contracting state (EPC)

AT BE CH CY DE DK ES FI FR GB GR IE IT LI LU MC NL PT SE

DOCDB simple family (publication)

**DE 19837332 A1 20000224**; DE 59909524 D1 20040624; EP 1045975 A1 20001025; EP 1045975 B1 20040519; JP 2002523670 A 20020730;  
KR 20010031172 A 20010416; US 6425539 B1 20020730; WO 0011339 A1 20000302

DOCDB simple family (application)

**DE 19837332 A 19980818**; DE 59909524 T 19990817; DE 9902544 W 19990817; EP 99952396 A 19990817; JP 2000566566 A 19990817;  
KR 20007004094 A 20000417; US 52965600 A 20000605