

Title (en)
Vapour feeding pump

Title (de)
Pumpeinrichtung zum Fördern von Dämpfen

Title (fr)
Pompe de refoulement de vapeurs

Publication
EP 1013931 B1 20060201 (DE)

Application
EP 99123667 A 19991129

Priority
DE 19859752 A 19981223

Abstract (en)
[origin: EP1013931A2] A shut-off valve(26) which closes when a predetermined switching temperature is exceeded is connected in series to the pump unit's inlet(16) or outlet(18). The shut-off valve has a bi-metal component deformable by heat action and which at the same time represents a control element. The deformable component may interact with a control element on the shut-off valve. The bi-metal component has two different stable operating positions, one where the shut-off valve is open and another where the valve is closed.

IPC 8 full level
F04B 49/10 (2006.01); **F04B 37/18** (2006.01); **F04B 37/20** (2006.01); **F04B 49/22** (2006.01)

CPC (source: EP)
F04B 37/18 (2013.01); **F04B 37/20** (2013.01); **F04B 49/22** (2013.01); **F04B 2205/10** (2013.01)

Citation (examination)

- US 5571310 A 19961105 - NANAJI SEIFOLLAH S [US]
- US 4830277 A 19890516 - HOOD DOUGLAS M [US]
- US 5263643 A 19931123 - WELLS GORDON K [US], et al
- US 5365963 A 19941122 - HOFFMANN HEINFRIED [DE]

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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)
EP 1013931 A2 20000628; **EP 1013931 A3 20001213**; **EP 1013931 B1 20060201**; AT E317064 T1 20060215; DE 19859752 A1 20000810; DE 59913096 D1 20060413; ES 2257005 T3 20060716

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