

Title (en)  
Pump unit (paint system)

Title (de)  
Pumpenaggregat ( Lacksystem )

Title (fr)  
Unité de pompage (système d'application de peinture)

Publication  
**EP 0830902 A2 19980325 (EN)**

Application  
**EP 97306733 A 19970902**

Priority  
GB 9618714 A 19960907

Abstract (en)  
A pump unit (28) for a paint system (10) comprises a pump head (124); a pump body (126); and a pump plate (128), which are moulded components clamped together. A piston (100), including a diaphragm (134) retained between the pump body and plate, extends through a piston aperture (137) in the pump plate. An inlet valve and an outlet valve each comprise a valve seat (174,182) formed in the pump head and body respectively, and a flap (172,184) adapted to seal against the seat. A pressure chamber (196) communicates with the outlet valve, and comprises a control actuator (104), including a diaphragm (194) retained between the pump body and plate, which actuator extends through a control aperture (202) in the pump plate selectively to enable and disable the pump in dependence on pressure in the pressure chamber, a pump outlet (102) communicating with the pressure chamber. The actuator operates on swing arm (108) that is spring biased, to switch off the motor when a predetermined pressure is reached. A dump/yield valve (122) releases excessive pressure in the pressure chamber. A switch button (30) operates the pump, the switch button serving to adjust spring bias (284) on the valve between a first high value in which the valve serves as a yield valve, and a second low value, where the valve serves as a dump valve.

IPC 1-7  
**B05C 17/03**

IPC 8 full level  
**B05C 17/03** (2006.01); **F04B 45/047** (2006.01); **F04B 49/02** (2006.01)

CPC (source: EP US)  
**B05C 17/0316** (2013.01 - EP US); **F04B 45/047** (2013.01 - EP US); **F04B 49/022** (2013.01 - EP)

Citation (applicant)  
GB 2142386 A 19850116 - KR ASS INC

Cited by  
EP3028768A1; US6840745B1; US9475084B2; WO0109510A3

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