

Title (en)  
PUMP CONTROL BY SUCTION THROTTLING WITH AN INCORPORATED PRESSURE LIMITATION

Publication  
**EP 0069612 B1 19850123 (FR)**

Application  
**EP 82401071 A 19820614**

Priority  
FR 8112447 A 19810619

Abstract (en)  
[origin: US4470427A] A pressure regulator for a pump aspirating a working fluid from a tank comprises a throttle valve at a junction between an inlet pipe extending from the tank and an outlet pipe terminating at the intake port of the pump. The discharge port of the pump is connected to a control port of the regulator housing in line with the inlet pipe, this control port being separated by a partition with a narrow passage from a chamber containing the shiftable valve body. The passage accommodates a small-diameter rod which has a flat tail penetrating that passage only when the discharge pressure of the pump has reached a certain threshold above a point at which that pressure has caused the rod to move the valve body into a blocking position against a countervailing spring pressure. This establishes a connection between the discharge and intake ports of the pump preventing further rises in the pump's delivery pressure.

IPC 1-7  
**F04B 49/00**

IPC 8 full level  
**F04B 49/22** (2006.01)

CPC (source: EP US)  
**F04B 49/225** (2013.01 - EP US); **Y10T 137/2567** (2015.04 - EP US)

Cited by  
FR2543615A1; US5165875A; WO9513474A1

Designated contracting state (EPC)  
DE GB IT

DOCDB simple family (publication)  
**EP 0069612 A1 19830112; EP 0069612 B1 19850123**; DE 3262034 D1 19850307; FR 2508112 A1 19821224; FR 2508112 B1 19860502; US 4470427 A 19840911

DOCDB simple family (application)  
**EP 82401071 A 19820614**; DE 3262034 T 19820614; FR 8112447 A 19810619; US 38872882 A 19820615