

Title (en)  
**PLUNGER PUMP**

Publication  
**EP 0280901 B1 19900207 (DE)**

Application  
**EP 88101593 A 19880204**

Priority  
DE 3706785 A 19870303

Abstract (en)  
[origin: EP0280901A2] 1. Plunger pump comprising at least two plunger working chambers and also plungers or plunger parts associated with the latter which operate in phase and which displace during their in phase strokes the same or different quantities of the pump medium, and also a releasable suction valve which is associated with the working chamber of the plunger or plunger part which displaces the larger volume and which remains permanently in the open position in the released state so that when the suction valve is released the pump can generate a low displacement flow at high pressure by means of the other plunger or plunger part which displaces the smaller volume and, when the suction valve is working, can generate a large displacement flow at low pressure by means of the working of the two plungers or plunger parts with an unchanged power requirement of the pump, characterised in that the two plunger working chambers (9, 10) are connected together through a duct with a non-return valve which closes in the direction of the working chamber (9) of the one plunger or plunger part, in that the suction side of the pump is only connected with the working chamber of the one plunger (7) or plunger part via the releasable suction valve (14) and in that the pressure side of the pump is connected with the plunger working chamber (10) of the other plunger (8) or plunger part only via a pressure valve (16) associated therewith.

IPC 1-7  
**F04B 5/00**

IPC 8 full level  
**F04B 5/00** (2006.01); **F04B 1/02** (2006.01); **F04B 5/02** (2006.01); **F04B 23/06** (2006.01); **F04B 49/24** (2006.01); **F04B 53/10** (2006.01)

CPC (source: EP)  
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Cited by  
CN112594181A; WO2015071405A1

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