

Title (en)  
PUMP ARRANGEMENT WITH DOUBLE PUMP

Publication  
**EP 0314994 B1 19910717 (DE)**

Application  
**EP 88117547 A 19881021**

Priority  
DE 3737350 A 19871104

Abstract (en)  
[origin: EP0314994A1] A pump arrangement (1) has two alternately conveying separate pumps (2, 3) and one axial piston motor (14). The piston rod (19) of the latter is divided into two sections (20, 21) each assigned to a separate pump (2, 3). Their spacing is variable by means of an adjusting device (22). Each section (20, 21) is connected to an actuating element (39, 40), each of which is assigned to one of the two limit position switch elements (37, 38) and actuates this at the end of each motor stroke. The axial piston motor (14) has two pistons (6, 11), each connected to a piston rod section (20, 21), which pistons are located in the area of an end surface (41, 42) of the piston displacement (15, 16) when the associated limit position switch element (37, 38) is actuated. If a minimum of two double pumps are used, a pump arrangement is created for two-component or multiple- component operation in which the component pumps are steplessly lift- adjustable, do not have to perform any dead travel and thereby work with low pulsation. <IMAGE>

IPC 1-7  
**F04B 9/12; F04B 43/06**

IPC 8 full level  
**F04B 9/12** (2006.01); **F04B 9/135** (2006.01); **F04B 43/06** (2006.01); **F04B 43/067** (2006.01); **F04B 43/073** (2006.01); **F04B 49/12** (2006.01)

CPC (source: EP US)  
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Cited by  
EP0903496A3; GB2296534A; GB2296534B; GB2280479A; FR2708050A1; GB2280479B; US11286923B2; US8642054B2; US11168714B2; WO2006029898A1; WO2019077207A1; WO9746819A1; US7807118B2; US8080216B2

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