

Title (en)  
HYDRAULIC VANE PUMP

Title (de)  
HYDRAULISCHE FLÜGELZELLENPUMPE

Title (fr)  
POMPE A PALETTES POUR FLUIDE HYDRAULIQUE

Publication  
**EP 1327077 A1 20030716 (EN)**

Application  
**EP 01902088 A 20010117**

Priority  

- US 0101516 W 20010117
- US 48936600 A 20000121

Abstract (en)  
[origin: WO0153701A1] This invention offers advantages and alternatives over the prior art by providing a dual port hydraulic fixed-displacement pump (20) which exhibits improved efficiency by diverting a portion of the flow of discharged fluid to the low-pressure side of a hydraulic system through electronic valve control. According to the present invention, a pair of discharge ports (12, 14) are provided, namely a first discharge port and a second discharge port. Under all operating conditions (e.g., low and high pump speed operating conditions) the fluid flowing within the first discharge port and primary discharge passageway is exposed to the working pressure of the primary line, which represents a high pressure line. The second discharge port fluidly communicates with a secondary discharge passageway which is in selective fluid communication with a low pressure line connected to a low pressure area of the pump (20) under first operating conditions and is also in selective communication with the first discharge port and the primary discharge passageway under second operating conditions.

IPC 1-7  
**F04C 15/04; F04C 11/00; F04C 2/344**

IPC 8 full level  
**F04C 2/344** (2006.01); **B62D 5/06** (2006.01); **B62D 6/02** (2006.01); **F04C 11/00** (2006.01); **F04C 14/06** (2006.01); **F04C 14/26** (2006.01);  
**F04C 15/06** (2006.01)

CPC (source: EP)  
**B62D 5/062** (2013.01); **B62D 6/02** (2013.01); **F04C 11/001** (2013.01); **F04C 14/065** (2013.01); **F04C 15/06** (2013.01); **F04C 2/3446** (2013.01)

Citation (search report)  
See references of WO 0153701A1

Designated contracting state (EPC)  
DE FR GB

DOCDB simple family (publication)  
**WO 0153701 A1 20010726**; EP 1327077 A1 20030716; JP 2004513275 A 20040430

DOCDB simple family (application)  
**US 0101516 W 20010117**; EP 01902088 A 20010117; JP 2001553536 A 20010117