

Title (en)

Sliding vane pump, particularly for power steering.

Title (de)

Flügelzellenpumpe, insbesondere zur Lenkhilfe.

Title (fr)

Pompe à palettes, spécialement pour directions assistées.

Publication

EP 0088811 A1 19830921 (DE)

Application

EP 82102063 A 19820313

Priority

EP 82102063 A 19820313

Abstract (en)

1. Rotary vane pump, particularly for assisted steering, with a housing including feed channels (38, 19) and discharge channels, a cam ring (15), a rotor (16), a pressure plate (17), valve devices (18) and a shaft (27, 41, 53), and with the following features : the housing is divided into a) a main housing part (10, 10') with a pump-insert cavity (13) for receiving the cam ring, rotor and pressure plate, and with a valve-receiving space (14) arranged next to it in the axial direction, and also with a radial sealing surface (11) and a further feed-channel sealing surface (12), b) a shaft-bearing housing (20, 40, 50) with a radial sealing surface (21), and c) a feed housing part (30, 60) with a further feed-channel sealing surface (31), d) the radial outer sealing surfaces (11, 21) and the further feed-channel sealing surfaces (12, 31) fitting one another and being pressed against one another, with gaskets (23, 33) interposed, when the parts are screwed together, characterised in that e) different shapes and sizes of the main housing part (10, 10'), shaft-bearing housing (20, 40, 50) and feed housing (30, 60) are provided for the construction of different pump sizes and types, f) the further feed-channel sealing surfaces (12, 31) are moved away from the pump axis in the radial direction and, as seen in the axial direction, are located outside the region defined by the parallel boundary surfaces (16a, 16b) of the rotor (16), that is to say the feed-channels (38, 19) sealed off by them extend next to the pump-insert cavity (13) up to both sides of the valve-receiving space (14) or of the valve devices (18) and then bend away in the direction of the inlet orifices of the working spaces of the pump.

Abstract (de)

Flügelzellenpumpe mit dreiterteiltem Gehäuse (10, 20, 30) zur Aufnahme einer Pumpenbaugruppe (1), einer Antriebsbaugruppe (2) und einer Zufuhrbaugruppe (3). Die Baugruppen (1, 2, 3) sowie das zugehörige Gehäusehauptteil (10), das Wellenlagergehäuse (20) und das Zufuhrgehäuseteil (30) sind in unterschiedlichen Formen und Größen vorgesehen, jedoch weist jedes Gehäuseteil jeweils aufeinanderpassende Abdichtflächen (11 und 21; 12 und 31) auf. Es können so unterschiedliche Pumpengrößen und -typen aufgebaut werden.

IPC 1-7

F04C 2/344; **F04C 15/02**

IPC 8 full level

F04C 2/344 (2006.01); **F04C 14/26** (2006.01); **F04C 15/00** (2006.01)

CPC (source: EP)

F04C 15/00 (2013.01)

Citation (search report)

- [A] DE 1104344 B 19610406 - GEN MOTORS CORP
- [Y] GB 2015648 A 19790912 - TOYODO KOKI KK
- [Y] GB 1290248 A 19720920

Cited by

DE3935293A1; DE102007011056A1

Designated contracting state (EPC)

AT CH DE FR GB IT LI SE

DOCDB simple family (publication)

EP 0088811 A1 19830921; **EP 0088811 B1 19850731**; DE 3265002 D1 19850905; JP H04111583 U 19920928; JP S58167891 A 19831004

DOCDB simple family (application)

EP 82102063 A 19820313; DE 3265002 T 19820313; JP 3934583 A 19830311; JP 5866791 U 19910725