

Title (en)

Rotary fluid energy converter.

Title (de)

Rotierender Energieumformer für Druckflüssigkeiten.

Title (fr)

Dispositif transformateur d'énergie d'un fluide à mouvement rotatoire.

Publication

EP 0234133 A1 19870902 (EN)

Application

EP 86400385 A 19860224

Priority

EP 86400385 A 19860224

Abstract (en)

A rotary fluid energy converter which is used either as a hydraulic pump or as a fluid motor has a housing (1), a torque ring (2), pistons (8), a cylinder barrel (15), and chambers (13). The ring (2) is closely held against the inner surface of the housing (1) via first static pressure bearings (3) which are circumferentially regularly spaced from one another. As the ring (2) is rotated relative to the housing (1), the volumes of the chambers (13) increase and decrease cyclically. Each of the first bearings (3) has two pressure pockets (7a, 7b ; 7a, 7b, 7c) axially neighboring each other. Fluid flows out of the chambers (13) and is distributed to the corresponding pressure pockets (7a, 7b, 7c) through restrictors (40a, 40b) or through slide valve elements (50) for automatically selectively pressure fluid into said pressure pockets.

IPC 1-7

F04B 1/10

IPC 8 full level

F04B 1/107 (2006.01)

CPC (source: EP)

F04B 1/1071 (2013.01)

Citation (search report)

- [A] EP 0078513 A1 19830511 - SHIMADZU CORP [JP]
- [A] DE 2416772 A1 19751009 - VOITH GETRIEBE KG

Designated contracting state (EPC)

DE FR GB IT

DOCDB simple family (publication)

EP 0234133 A1 19870902; EP 0234133 B1 19890920; DE 3665753 D1 19891026

DOCDB simple family (application)

EP 86400385 A 19860224; DE 3665753 T 19860224