

Title (en)
REVERSIBLE GEAR MACHINE (PUMP OR MOTOR)

Publication
EP 0293585 B1 19910612 (DE)

Application
EP 88106171 A 19880419

Priority
DE 3718229 A 19870530

Abstract (en)
[origin: EP0293585A1] The reversible gear machine has two externally intermeshing gear wheels which are arranged in a housing. The gear shafts are supported in bearing elements (18, 19), a sealing plate (26), which by means of pressure fields (A to D) formed on its rear side is brought into sealing contact with the gear side faces, being arranged at least between one bearing element and the gear side faces. The pressure fields are defined by a seal arrangement (27), which is formed in a corresponding groove (28) in one of the bearing elements (18). One set of pressure fields (A, B) are acted on from the inlet and/or outlet side, the other pressure fields (C and D) by a pressure arbitrarily controlled by a pressure regulating valve (46). In this way starting is simplified, particularly when the machine is used as a geared motor, and the efficiency losses in operation are low. In addition the housing inner chamber is considerably relieved of pressure. In this way the service life of the machine is improved. <IMAGE>

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F04C 2/14

IPC 8 full level
F04C 2/14 (2006.01); **F04C 14/06** (2006.01); **F04C 15/00** (2006.01)

CPC (source: EP)
F04C 14/06 (2013.01); **F04C 15/0026** (2013.01); **F05C 2225/04** (2013.01)

Cited by
EP0563661A1; DE10104621B4; EP0379697A3; GR1009196B; GB2233712A; EP0456263A1; EP0415089A3

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