

Title (en)

Axial piston pump, particularly for water high-pressure cleaner.

Title (de)

Axialkolbenpumpe, insbesondere für Wasser-Hochdruckreiniger.

Title (fr)

Pompe à pistons axiaux, particulièrement pour nettoyeur haute pression à eau.

Publication

EP 0476450 B1 19950301 (DE)

Application

EP 91115052 A 19910906

Priority

- DE 4029674 A 19900919
- DE 4030412 A 19900926
- DE 4039926 A 19901214

Abstract (en)

[origin: EP0476450A1] An axial piston pump, particularly for water high-pressure cleaner, having an outer housing (1) with a motor connection side (2) and a pump connection side (3), a wobble plate, at least two pump pistons (10), which are arranged parallel to the longitudinal axis (4) of the outer housing (1) in piston guides and bear in each case with a drive end against the wobble plate, cylinders which accommodate in an axially displaceable fashion the opposite pump ends of the pump pistons (10) and in each case enclose a working volume with the pump ends, and a valve arrangement adjoining the inlet and outlet openings of the cylinders, is particularly expedient in terms of production engineering because each piston guide is an independent part having a cylindrical outer surface and forming an accommodation chamber and in each case a pump piston (10) forms in conjunction with the associated piston guide a unit (21) that can be replaced as a whole, because the cylinders are integrated with their inlet and outlet openings into the units (21) in each case, because there is provided per cylinder a pressure valve and a suction valve or a double-acting pressure/suction valve from which corresponding pressure or suction channels originate, because the valves or the one pressure/suction valve are integrated in the units (21), and because in addition a valve sleeve is connected in a tear-proof fashion to the corresponding piston guide in each case, particularly being screwed, and closes the accommodation chamber. <IMAGE>

IPC 1-7

F04B 1/14; F04B 53/10; F04B 53/00

IPC 8 full level

F04B 1/14 (2006.01); **F04B 53/00** (2006.01); **F04B 53/08** (2006.01); **F04B 53/10** (2006.01)

CPC (source: EP)

F04B 1/14 (2013.01); **F04B 1/143** (2013.01); **F04B 53/08** (2013.01); **F04B 53/104** (2013.01); **F05C 2225/04** (2013.01); **F05C 2253/12** (2013.01)

Cited by

CN112517525A; CN112555120A; US10280905B2; WO2016045841A1

Designated contracting state (EPC)

BE CH DE DK GB IT LI NL

DOCDB simple family (publication)

EP 0476450 A1 19920325; **EP 0476450 B1 19950301**; DE 59104762 D1 19950406; DK 0476450 T3 19950410

DOCDB simple family (application)

EP 91115052 A 19910906; DE 59104762 T 19910906; DK 91115052 T 19910906