

Title (en)

PISTON PUMP FOR A HIGH-PRESSURE CLEANING DEVICE

Title (de)

KOLBENPUMPE FÜR EIN HOCHDRUCKREINIGUNGSGERÄT

Title (fr)

POMPE À PISTON POUR UN APPAREIL DE NETTOYAGE SOUS HAUTE PRESSION

Publication

**EP 2805050 B1 20160727 (DE)**

Application

**EP 12700837 A 20120120**

Priority

EP 2012050869 W 20120120

Abstract (en)

[origin: WO2013107520A1] The invention relates to a piston pump (10) for a high-pressure cleaning device having a plurality of pump chambers (20), into which in each case one piston (22) which can move to and fro dips and which are flow-connected in each case via an upstroke valve (24) to a suction inlet (14) and via a delivery valve (26) to a pressure outlet (16), wherein the upstroke valve (24) comprises an upstroke-valve closing body (28) which can bear sealingly against an upstroke-valve seat (30), and wherein the delivery valve (26) comprises a delivery-valve closing body (48) which can bear sealingly against a delivery-valve seat (52), wherein the delivery-valve seat (52) and the upstroke-valve seat (30) are at different radial spacings from a pump longitudinal axis (64). In order to develop the piston pump in such way that it has an increased mechanical load-bearing capability without the material thickness thereof being increased, it is proposed that the delivery-valve seat (52) is arranged offset with respect to the upstroke-valve seat (30) in the circumferential direction of the piston pump in relation to the pump longitudinal axis (64).

IPC 8 full level

**F04B 1/04** (2006.01); **F04B 53/00** (2006.01); **F04B 53/16** (2006.01)

CPC (source: EP US)

**F04B 1/0421** (2013.01 - EP US); **F04B 1/182** (2013.01 - US); **F04B 53/007** (2013.01 - EP US); **F04B 53/164** (2013.01 - EP US)

Cited by

DE102020131796A1; WO2022117239A1; DE102020131798A1; WO2022117240A1

Designated contracting state (EPC)

AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

DOCDB simple family (publication)

**WO 2013107520 A1 20130725**; BR 112014011579 A2 20170509; CN 104053907 A 20140917; CN 104053907 B 20160914; EP 2805050 A1 20141126; EP 2805050 B1 20160727; US 2014328701 A1 20141106

DOCDB simple family (application)

**EP 2012050869 W 20120120**; BR 112014011579 A 20120120; CN 201280067559 A 20120120; EP 12700837 A 20120120; US 201414334021 A 20140717