

Title (en)
HORIZONTALLY SPLIT SCREW-SPINDLE PUMP

Title (de)
HORIZONTAL GETEILTE SCHRAUBENSPINDELPUMPE

Title (fr)
POMPE À BROCHE HÉLICOÏDALE, DIVISÉE HORIZONTALEMENT

Publication
EP 3532729 B1 20201230 (DE)

Application
EP 17801607 A 20171027

Priority
• DE 102016120579 A 20161027
• EP 2017077555 W 20171027

Abstract (en)
[origin: WO2018078073A1] The invention relates to a screw pump (1), in particular a double screw pump, comprising a multiple-piece housing (2, 7, 15, 21) and at least two coupled rotors (3, 3a) which form chambers with in each case at least one thread-shaped profile (4, 4a) which is configured at least in regions with helical channels (5, 5a) and with dividing walls (6, 6a) which delimit the channels (5, 5a), wherein the rotors (3, 3a) perform an opposed rotor rotation, and the dividing walls (6, 6a) engage into one another in a gearwheel-like manner, a running housing part (7), wherein the running housing part (7) encloses the rotors (3, 3a) without contact, wherein the rotors (3, 3a) form, with the running housing part (7), at least one conveying chamber (8, 8a) for the fluid to be conveyed, wherein the conveying chamber (8, 8a) migrates axially along the rotor axis (10, 10a) and conveys the fluid from a suction chamber (11) into a pressure chamber (12), a suction-side connector element (13) which is connected fluidically to the suction chamber (11), and a pressure-side connector element (14) which is connected fluidically to the pressure chamber (12), wherein the suction-side connector element (13) and the pressure-side connector element (14) are arranged on a connector housing part (15) of the multiple-piece housing (2, 7, 15, 21), wherein the housing (2, 7, 15, 21) has a planar dividing plane (16) which runs parallel to the rotor axes (10, 10a) between the running housing part (7) and the connector housing part (15).

IPC 8 full level
F01C 21/10 (2006.01); **F04C 2/16** (2006.01); **F04C 2/20** (2006.01); **F04C 15/00** (2006.01)

CPC (source: EP US)
F01C 21/10 (2013.01 - EP US); **F04C 2/16** (2013.01 - EP US); **F04C 15/0003** (2013.01 - US); **F04C 15/0069** (2013.01 - EP); **F04C 15/0096** (2013.01 - EP); **F04C 2240/30** (2013.01 - US); **F04C 2240/70** (2013.01 - EP)

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)
DE 102016120579 B3 20180405; CN 110036202 A 20190719; CN 110036202 B 20201030; EP 3532729 A1 20190904; EP 3532729 B1 20201230; ES 2858000 T3 20210929; RU 2019116010 A 20201127; US 11530699 B2 20221220; US 2019249662 A1 20190815; WO 2018078073 A1 20180503

DOCDB simple family (application)
DE 102016120579 A 20161027; CN 201780066556 A 20171027; EP 17801607 A 20171027; EP 2017077555 W 20171027; ES 17801607 T 20171027; RU 2019116010 A 20171027; US 201716345597 A 20171027