

Title (en)

Dual spindle helical spindle pump with a single-entry design with gears for rotatively coupling the spindles

Title (de)

Zweispindelige Schraubenspindelpumpe in einflutiger Bauweise mit Zahnrädern, mittels derer die Spindeln drehgekoppelt sind

Title (fr)

Pompe à vis à broche double dans une construction à simple flux avec des roues d'engrenage pour coupler les broches en rotation

Publication

EP 2634366 A3 20151118 (DE)

Application

EP 13000395 A 20130128

Priority

DE 102012001700 A 20120131

Abstract (en)

[origin: EP2634366A2] The pump (10) has a screw thread with screw (38) that is provided in a connection hole (37) for locking an attachment element (27) and a gear wheel (26). The gear wheel and the attachment unit are rotated in opposite directions using the connection hole so that backlash between edges of feed screws (17,18) is adjusted. An opening is formed in gear section (14) of pump housing (11) and is covered by a lid which is released in mounted state of the pump.

IPC 8 full level

F01C 17/02 (2006.01); **F01C 21/10** (2006.01); **F04C 2/00** (2006.01); **F04C 2/16** (2006.01); **F04C 15/00** (2006.01)

CPC (source: EP US)

F01C 17/02 (2013.01 - EP US); **F01C 21/10** (2013.01 - EP US); **F04C 2/00** (2013.01 - US); **F04C 2/16** (2013.01 - EP US); **F04C 15/0061** (2013.01 - EP US); **F04C 2230/601** (2013.01 - EP US); **F04C 2230/80** (2013.01 - EP US); **F04C 2240/60** (2013.01 - EP US); **F04C 2270/16** (2013.01 - EP US); **F04C 2270/17** (2013.01 - EP US)

Citation (search report)

- [Y] WO 2004053333 A1 20040624 - BORNEMANN J H GMBH [DE], et al
- [Y] EP 0096666 A1 19831221 - ATLAS COPCO AB [SE]
- [Y] US 2641937 A 19530616 - ERHARDT JR JOHN EDWARD, et al
- [A] EP 1054160 A1 20001122 - STERLING FLUID SYS GMBH [DE]
- [A] DE 2637221 A1 19770407 - SUTER MASCHINEN UND APPARATEBA

Cited by

CN111082629A; EP4095384A1

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

Designated extension state (EPC)

BA ME

DOCDB simple family (publication)

DE 102012001700 A1 20130801; **DE 102012001700 B4 20130912**; EP 2634366 A2 20130904; EP 2634366 A3 20151118; EP 2634366 B1 20240228; EP 2634366 C0 20240228; ES 2974944 T3 20240702; US 2013251581 A1 20130926; US 9624925 B2 20170418

DOCDB simple family (application)

DE 102012001700 A 20120131; EP 13000395 A 20130128; ES 13000395 T 20130128; US 201313754650 A 20130130