

Title (en)  
SCREW SPINDLE PUMP

Title (de)  
SCHRAUBENSPINDELPUMPE

Title (fr)  
POMPE À VIS

Publication  
**EP 3913187 B1 20221026 (DE)**

Application  
**EP 21168615 A 20210415**

Priority  
DE 102020113372 A 20200518

Abstract (en)  
[origin: US2021355938A1] A screw pump, including a housing with a running bore having at least two intersecting bores, each of which receives a spindle, wherein the spindles have worm screw profiles which intermesh in portions and in operation bend in a defined bending direction under a hydraulic bending pressure, wherein each bore is configured as a slot with a longer first axis of symmetry and a shorter second axis of symmetry standing orthogonally thereto, wherein the longer first axis of symmetry runs in the bending direction.

IPC 8 full level  
**F01C 21/10** (2006.01); **F04C 2/08** (2006.01); **F04C 2/16** (2006.01)

CPC (source: CN EP US)  
**F01C 21/10** (2013.01 - EP); **F04C 2/086** (2013.01 - CN EP); **F04C 2/16** (2013.01 - CN EP US); **F04C 2230/10** (2013.01 - US); **F04C 2230/602** (2013.01 - EP US); **F04C 2240/30** (2013.01 - US); **F04C 2240/81** (2013.01 - EP); **F04C 2250/30** (2013.01 - EP US); **F04C 2270/17** (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)  
**EP 3913187 A1 20211124; EP 3913187 B1 20221026**; BR 102021009059 A2 20211123; CN 113685348 A 20211123; CN 113685348 B 20230321; DE 102020113372 A1 20211118; ES 2934065 T3 20230216; PL 3913187 T3 20230123; US 11401931 B2 20220802; US 2021355938 A1 20211118

DOCDB simple family (application)  
**EP 21168615 A 20210415**; BR 102021009059 A 20210510; CN 202110482066 A 20210430; DE 102020113372 A 20200518; ES 21168615 T 20210415; PL 21168615 T 20210415; US 202117230359 A 20210414