

Title (en)

Conveying element for an eccentric screw pump and eccentric screw pump

Title (de)

Förderelement für eine Exzentrerschneckenpumpe und Exzentrerschneckenpumpe

Title (fr)

Élément de transport pour une pompe à vis sans fin excentrique et pompe à vis sans fin excentrique

Publication

EP 2532833 A1 20121212 (DE)

Application

EP 11169407 A 20110610

Priority

EP 11169407 A 20110610

Abstract (en)

The pump has a stator with internal screw threads for providing flow volumes (v_1 , v_2), and a rotor (1) arranged in the stator. The rotor has thread pitches with an external screw thread (2) for providing one flow volume. Another external screw thread (3) for providing another flow volume is connected with the external screw thread along longitudinal direction, where the former flow volume is preferably 1.5 to 3 times higher than the latter flow volume. The internal and external screw threads are formed as integral parts.

Abstract (de)

Es wird ein Förderelement für eine Exzentrerschneckenpumpe zum Fördern eines Fluids vorgeschlagen, welche ein erstes Schraubengewinde zum Bereitstellen eines ersten Fördervolumens und ein zweites Schraubengewinde zum Bereitstellen eines zweiten Fördervolumens aufweist, wobei das erste Fördervolumen größer als das zweite Fördervolumen ist.

IPC 8 full level

F01C 21/08 (2006.01); **F04C 2/107** (2006.01)

CPC (source: EP)

F04C 2/084 (2013.01); **F04C 2/1071** (2013.01); **F04C 2250/20** (2013.01)

Citation (applicant)

DE 202009002823 U1 20090730 - DAUNHEIMER RALF [DE]

Citation (search report)

- [X] DE 10118785 A1 20021024 - VISCOTEC PUMPEN UND DOSIERTECH [DE]
- [X] US 6093004 A 20000725 - VARADAN RAJAN [US], et al
- [X] US 5108273 A 19920428 - ROMANYSZYN JR MICHAEL T [US]
- [X] RU 55050 U1 20060727
- [X] EP 2063125 A1 20090527 - GRUNDFOS MANAGEMENT AS [DK]
- [X] EP 1503034 A1 20050202 - DAVYDOV VLADIMIR VSEVOLODOVICH [RU]
- [A] EP 0196991 A1 19861008 - HUGHES TOOL CO [US]

Citation (third parties)

Third party :

- AAGE N. ET AL: "MATHEMATICAL PROBLEMS FOR MOINEAU PUMPS", 6 November 2006 (2006-11-06), pages 1 - 48, XP003033480
- GRAVESEN J.: "SPHERICAL CURVES FOR THE DESIGN OF CONICAL MOINEAU PUMPS", SIAM ACTIVITY GROUP ON GEOMETRIC DESIGN, 13 June 2012 (2012-06-13), pages 1 - 3, XP003033481
- HARRIC VAN DER HAGHEN: "THE ENGINE OF THE FUTURE PROJECT", JORDAAN, pages 1 - 8, XP003035664

Cited by

DE102016009028A1; USD971967S; CN105697373A; DE102013100451A1; DE102013100451B4; FR3136019A1; WO2014111082A1; WO2018019318A1

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)

EP 2532833 A1 20121212; EP 2532833 B1 20150729

DOCDB simple family (application)

EP 11169407 A 20110610