

Title (en)

PUMP FOR CONVEYING A LIQUID, IN PARTICULAR AN EXHAUST-GAS CLEANING ADDITIVE

Title (de)

PUMPE ZUR FÖRDERUNG EINER FLÜSSIGKEIT, INSbesondere EINES ABGASREINIGUNGSADDITIVS

Title (fr)

POMPE POUR REFOULER UN LIQUIDE, NOTAMMENT UN ADDITIF DE PURIFICATION DE GAZ D'ÉCHAPPEMENT

Publication

**EP 3120025 A1 20170125 (DE)**

Application

**EP 15710204 A 20150318**

Priority

- EP 14290068 A 20140319
- EP 2015055652 W 20150318

Abstract (en)

[origin: WO2015140201A1] The invention relates to a pump (1) for conveying a liquid, comprising at least one pump housing (2), which has at least one inlet (3) and at least one outlet (4) and an inner circumferential surface (13) and a geometric axis (53), wherein an eccentric (5), which can be rotated about the geometric axis (53) in relation to the pump housing (2), is arranged within the pump housing (2), wherein a deformable element (7) is arranged between the inner circumferential surface (13) of the pump housing (2) and the eccentric (5) and wherein a conveying channel (8) from the at least one inlet (3) to the at least one outlet (4) is formed by means of the deformable element (7) and the inner circumferential surface (13) of the pump housing (2) and wherein furthermore the deformable element (7) is pressed against the pump housing (2) by the eccentric (5) in some sections in such a way that at least one movable seal (9) of the conveying channel (8) and at least one closed pump volume (10) in the conveying channel (8) are formed, which at least one seal and at least one closed pump volume can be moved in order to convey the liquid along the conveying channel (8) from the inlet (3) to the outlet (4) by means of a rotational motion of the eccentric (5), wherein at least one receptacle (14), in which at least one edge region (20) of the deformable element (7) is accommodated, is formed by the circumferential surface (13) of the pump housing (2) and at least one counter-holder (15).

IPC 8 full level

**F04C 5/00** (2006.01); **F04B 43/12** (2006.01)

CPC (source: CN EP US)

**B01D 53/9431** (2013.01 - US); **F01N 3/206** (2013.01 - CN EP US); **F01N 3/2066** (2013.01 - EP US); **F04B 13/02** (2013.01 - CN EP US);  
**F04C 5/00** (2013.01 - CN EP US); **F04C 15/0003** (2013.01 - US); **F04C 15/06** (2013.01 - US); **F01N 3/2066** (2013.01 - CN);  
**F01N 2610/02** (2013.01 - CN EP US); **F01N 2610/1406** (2013.01 - US); **F01N 2610/1433** (2013.01 - CN EP US); **F01N 2610/1453** (2013.01 - US);  
**F04C 2210/1083** (2013.01 - CN EP US); **F04C 2220/24** (2013.01 - CN EP US); **F04C 2240/20** (2013.01 - US); **F04C 2240/30** (2013.01 - US);  
**Y02A 50/20** (2017.12 - EP US); **Y02T 10/12** (2013.01 - EP US)

Citation (search report)

See references of WO 2015140201A1

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)

**WO 2015140201 A1 20150924**; CN 106068367 A 20161102; CN 106068367 B 20181113; EP 3120025 A1 20170125;  
US 10294937 B2 20190521; US 2017016444 A1 20170119

DOCDB simple family (application)

**EP 2015055652 W 20150318**; CN 201580014544 A 20150318; EP 15710204 A 20150318; US 201515124065 A 20150318