

Title (en)

FLUID DELIVERY DEVICE

Title (de)

FLUIDFÖRDERRICHTUNG

Title (fr)

DISPOSITIF DE TRANSPORT DE FLUIDE

Publication

**EP 3728850 B1 20211027 (DE)**

Application

**EP 18829267 A 20181213**

Priority

- DE 102017223675 A 20171222
- EP 2018084721 W 20181213

Abstract (en)

[origin: WO2019121307A1] The invention relates to a fluid delivery device (1) having a forepump (2) and a main pump (3) fluidically connected to the forepump (2), wherein the forepump (2) can be driven via a forepump input shaft (13) and the main pump (3) can be driven via a pump input shaft (14). According to the invention, the forepump (2) has a forepump drive gear (16) coupled to the forepump input shaft (13) and a forepump delivery gear (17) interacting with the forepump drive gear (16) to deliver the fluid, wherein the forepump (2) and the main pump (3) are drivingly coupled to a common input shaft (15), and wherein the forepump delivery gear (17) and the main pump input shaft (14) are connected to one another via a connecting shaft (21) such that the forepump input shaft (13) is coupled directly to the drive shaft (15) and the main pump input shaft (14) is coupled to the drive shaft (15) via the connecting shaft (21).

IPC 8 full level

**F04C 2/10** (2006.01); **F04C 2/18** (2006.01); **F04C 11/00** (2006.01); **F04C 14/26** (2006.01)

CPC (source: EP US)

**F04C 2/101** (2013.01 - EP US); **F04C 2/18** (2013.01 - EP US); **F04C 11/001** (2013.01 - EP US); **F04C 11/005** (2013.01 - US);  
**F04C 14/26** (2013.01 - EP US); **F04C 2240/30** (2013.01 - EP); **F04C 2240/60** (2013.01 - US)

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 102017223675 A1 20190627; DE 102017223675 B4 20230126;** CN 111566349 A 20200821; CN 111566349 B 20220902;  
EP 3728850 A1 20201028; EP 3728850 B1 20211027; US 11248602 B2 20220215; US 2020318635 A1 20201008;  
WO 2019121307 A1 20190627

DOCDB simple family (application)

**DE 102017223675 A 20171222;** CN 201880083337 A 20181213; EP 18829267 A 20181213; EP 2018084721 W 20181213;  
US 201816955492 A 20181213