

Title (en)

HYDRAULIC PUMP WITH AN INTEGRATED BUFFER TANK

Title (de)

HYDRAULIKPUMPE MIT INTEGRIERTEM PUFFERTANK

Title (fr)

POMPE HYDRAULIQUE DOTÉE D'UN RÉSERVOIR TAMPON INTÉGRÉ

Publication

**EP 4015826 A1 20220622 (EN)**

Application

**EP 21215686 A 20211217**

Priority

IT 202000031490 A 20201218

Abstract (en)

A hydraulic pump with an integrated buffer tank, comprising a path for the liquid from at least one suction inlet of the liquid into the pump to a discharge outlet of the liquid from the pump and, along said path,- downstream of said inlet, a pressure section configured to increase the pressure of the liquid,- downstream of said pressure section, a buffer tank of pressurized liquid comprising an elastically variable storage volume and an elastic opposing system of the expansion of the said storage volume, so that an increase in the pressure of the liquid in said tank corresponds to an expansion of the storage volume overcoming the opposition of said opposing system, while a decrease in the pressure of the liquid in the tank corresponds to a contraction of said storage volume,characterized in that said buffer tank comprises a plurality of distinct liquid storage chambers, each at least partly elastically expansible, all at the same discharge pressure of the liquid, said chambers being subject to said opposing system adapted to oppose their expansion

IPC 8 full level

**F04D 13/14** (2006.01); **F04D 1/06** (2006.01); **F04D 13/16** (2006.01); **F04D 29/42** (2006.01)

CPC (source: EP)

**F04D 1/06** (2013.01); **F04D 13/16** (2013.01)

Citation (search report)

- [A] US 2020109792 A1 20200409 - SIERAKOWSKI-LARSEN JANUS LUKAS [DK]
- [A] EP 2918737 A1 20150916 - VAREM SPA [IT]
- [A] DE 102019001436 A1 20200903 - HYDAC TECHNOLOGY GMBH [DE]

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WO2024134518A1

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 4015826 A1 20220622; EP 4015826 B1 20230830;** DK 4015826 T3 20231211; ES 2965195 T3 20240411; IT 202000031490 A1 20220618

DOCDB simple family (application)

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