

Title (en)
APPARATUS FOR CONVEYING THICK MATTER

Title (de)
VORRICHTUNG ZUR FÖRDERUNG VON DICKSTOFF

Title (fr)
DISPOSITIF POUR LE TRANSPORT DE MATIÈRE ÉPAISSE

Publication
EP 3803117 A1 20210414 (DE)

Application
EP 19726644 A 20190522

Priority
• DE 102018208263 A 20180525
• EP 2019063211 W 20190522

Abstract (en)
[origin: WO2019224244A1] The invention relates to an apparatus (1) for conveying thick matter (DS), having: - at least one drive cylinder (10a, 10b) for receiving hydraulic fluid (HF), at least one drive piston (11a, 11b), which is arranged in the drive cylinder (10a, 10b), at least one conveying cylinder (12a, 12b) for receiving thick matter (DS), at least one conveying piston (13a, 13b), which is arranged in the conveying cylinder (12a, 12b), and at least one piston rod (14a, 14b), which is fastened to the drive piston (11a, 11b) for coupling motion together with the conveying piston (13a, 13b), - wherein the drive cylinder (10a, 10b) has a rod-side opening (SDa, SDb) for applying pressure to a rod side (SKa, SKb) of the drive piston (11a, 11b) by means of hydraulic fluid (HF) and a floor-side opening (BDa, BDb) for applying pressure to a floor side (BKa, KBb) of the drive piston (11a, 11b) facing away from the rod side (SKa, SKb) by means of hydraulic fluid (HF), - a drive pump (20), which is designed to generate a drive volume flow (AVF) having a drive pressure (pA) of hydraulic fluid (HF) for moving the drive piston (11a, 11b), - at least one pump connection (30a, 30b), which is designed for variable connection of the drive pump (20) to the rod-side opening (SDa, SDb) or the floor-side opening (BDa, BDb) for the flow of hydraulic fluid (HF), - a sensor device (40), which is designed for automatic detection of whether the pump connection (30a, 30b) is connected to the rod-side opening (SDa, SDb) or the floor-side opening (BDa, BDb), and - a control unit (50), which is designed to control the apparatus (1) in a rod-side operating mode, when the rod-side pump connection is detected, and in a floor-side operating mode, when the floor-side pump connection is detected.

IPC 8 full level
F04B 15/02 (2006.01); **F04B 9/105** (2006.01)

CPC (source: EP US)
F04B 1/02 (2013.01 - US); **F04B 9/103** (2013.01 - US); **F04B 9/1053** (2013.01 - EP); **F04B 15/02** (2013.01 - EP US); **F04B 17/06** (2013.01 - US); **F04B 49/002** (2013.01 - US); **F04B 49/005** (2013.01 - US); **F04B 51/00** (2013.01 - US); **F04B 53/144** (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

Designated extension state (EPC)
BA ME

DOCDB simple family (publication)
WO 2019224244 A1 20191128; DE 102018208263 A1 20191128; EP 3803117 A1 20210414; EP 3803117 B1 20240821;
US 11959468 B2 20240416; US 2021239103 A1 20210805

DOCDB simple family (application)
EP 2019063211 W 20190522; DE 102018208263 A 20180525; EP 19726644 A 20190522; US 201917058276 A 20190520