

Title (en)

METHOD AND CONTROL DEVICE FOR THE ROTATIONAL-SPEED-VARIABLE CONTROL OF AN EXPELLER PUMP UNIT AND EXPELLER PUMP ARRANGEMENT

Title (de)

VERFAHREN UND REGELVORRICHTUNG ZUR DREHZAHLVARIABLEN REGELUNG EINES VERDRÄNGERPUMPENAGGREGATES SOWIE VERDRÄNGERPUMPENANORDNUNG

Title (fr)

PROCÉDÉ ET DISPOSITIF DE RÉGLAGE POUR LA RÉGULATION À VITESSE VARIABLE D'UN GROUPE POMPE VOLUMÉTRIQUE ET ENSEMBLE DE POMPE VOLUMÉTRIQUE

Publication

EP 2640973 A1 20130925 (DE)

Application

EP 11782643 A 20111117

Priority

- DE 102010044053 A 20101117
- EP 2011070378 W 20111117

Abstract (en)

[origin: WO2012066090A1] The invention relates to a method for the rotational-speed-variable control of an expeller pump unit for feeding a fluid, composed of an expeller pump and a drive, wherein the drive is composed of an electric drive motor and a frequency converter, by means of a control device, wherein a final pressure of the expeller pump is adjusted to a final pressure setpoint value by the control device, as well as a suitable control device for carrying out the method and a corresponding expeller pump arrangement. The control device (11) according to the invention detects state values which are supplied by the drive, in particular relating to the position, rotational speed and torque of the drive motor (6). The control device (11) determines therefrom the control variable, in particular the final pressure of the expeller pump (2). The expeller pump unit is adjusted to the setpoint value without using sensors.

IPC 8 full level

F04B 1/26 (2006.01); **F04B 49/06** (2006.01); **F04B 49/12** (2006.01)

CPC (source: EP US)

F04B 49/065 (2013.01 - EP US); **F04B 49/12** (2013.01 - EP); **F04D 15/0088** (2013.01 - US); **F04B 49/12** (2013.01 - US); **F04B 2201/1202** (2013.01 - US); **F04B 2201/1208** (2013.01 - US); **F04B 2203/0207** (2013.01 - EP US); **F04B 2203/0209** (2013.01 - EP US); **F04D 15/0066** (2013.01 - US)

Citation (search report)

See references of WO 2012066090A1

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 102011086572 A1 20120524; **DE 102011086572 B4 20190814**; BR 112013012171 A2 20210727; BR 112013012171 B1 20220329; CN 103328822 A 20130925; CN 103328822 B 20160810; EP 2640973 A1 20130925; EP 2640973 B1 20181003; US 10690129 B2 20200623; US 2013251540 A1 20130926; WO 2012066090 A1 20120524

DOCDB simple family (application)

DE 102011086572 A 20111117; BR 112013012171 A 20111117; CN 201180055143 A 20111117; EP 11782643 A 20111117; EP 2011070378 W 20111117; US 201313894976 A 20130515