

Title (en)

Method of controlling an electric motor driving a centrifugal pump.

Title (de)

Steuerungsverfahren eines Elektromotors zum Antrieb einer Kreiselpumpe.

Title (fr)

Méthode de contrôle d'un moteur électrique actionnant une pompe centrifuge.

Publication

**EP 0584713 A1 19940302 (EN)**

Application

**EP 93113211 A 19930818**

Priority

- DK 1293 A 19930106
- DK 104192 A 19920821

Abstract (en)

A method for controlling an electric motor (2) driving a centrifugal pump (3) having a diameter ratio  $D1/D2$  less than approximately  $1/2$  and a varying fluid flow-through (Q), the motor (2) being connected to a supply mains (R,S,T) through a power-control device (1). An electrical measuring signal (I) is produced, being proportional to the current drawn by the motor (2) or by the power-control device (1), and based on the known characteristics of the motor (2) and the pump (3), the electrical measuring signal (I) is processed so as to produce a control signal (f), being used as an input signal to the power-control device (1). The electrical measuring signal (I) is processed in such a manner, that the control signal (f) causes the delivery pressure (H) of the pump (3) to be substantially constant over a large variation interval for the fluid flow-through (Q). <IMAGE>

IPC 1-7

**F04D 15/00**

IPC 8 full level

**F04D 15/00** (2006.01)

CPC (source: EP)

**F04D 15/0066** (2013.01)

Citation (search report)

- [X] EP 0226858 A1 19870701 - OPLAENDER WILO WERK GMBH [DE]
- [A] DE 2946049 A1 19810527 - HOECHST AG [DE]
- [A] DE 3824057 A1 19900125 - LOEWE PUMPENFABRIK GMBH [DE]

Cited by

CN102628436A; EP0833436A3; GB2309746A; GB2309746B; GB2352533A; GB2352533B; WO2013068016A1; US8425200B2; GB2303227B; US5934508A; US6070760A; CN101871447A; EP2246569A3; EP0978657A4; US2018304757A1; US11034253B2; US2021300195A1; US12005796B2; WO9804835A1; US7176674B2; JP2007162700A; KR100533699B1

Designated contracting state (EPC)

AT BE CH DE DK ES FR GB GR IE IT LI LU MC NL PT SE

DOCDB simple family (publication)

**EP 0584713 A1 19940302; EP 0584713 B1 19970716**; AT E155552 T1 19970815; DE 69312183 D1 19970821; DE 69312183 T2 19980108; DK 1293 A 19940222; DK 1293 D0 19930106

DOCDB simple family (application)

**EP 93113211 A 19930818**; AT 93113211 T 19930818; DE 69312183 T 19930818; DK 1293 A 19930106