

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