Title (en)

DRIVE CONTROL FOR AN ELECTRIC DRIVE WITH A SECURE ELECTRICAL SEPARATION OF POWER ELEMENT AND CONTROL ELEMENT

Title (de)

ANTRIEBSSTEUERUNG FÜR EINEN ELEKTRISCHEN ANTRIEB MIT SICHERER ELEKTRISCHER TRENNUNG VON LEISTUNGSTEIL UND REGELUNGSEINHEIT

Title (fr)

COMMANDE D'ENTRAINEMENT POUR UN ENTRAINEMENT ELECTRIQUE PRESENTANT UNE ISOLATION ELECTRIQUE FIABLE ENTRE UNE PARTIE DE PUISSANCE ET UNE UNITE DE REGULATION

Publication

EP 1320924 A1 20030625 (DE)

Application

EP 01982120 A 20010917

Priority

- DE 0103575 W 20010917
- DE 10048353 A 20000929

Abstract (en)

[origin: WO0227913A1] The invention relates to a drive control for an electric drive with a secure electrical separation of power element and control element. The aim of the invention is to reduce the number of components such as optic couplers and buffer amplifiers between the power element and a control electronics. To this end, a suitable electrical transformer (U) is inserted in a digital communication interface (K) between the control unit (R) and the control electronics (A) for the purpose of providing a secure electrical separation. To make use of a transformer (U) possible, a non-zero frequency encoding, for example a Manchester encoding, is carried out. Alternatively, an Ethernet physics can be used to provide a suitable communication interface. The transformer electrically insulates the two communication paths from each other that are provided in an Ethernet physics and preferably has little coupling capacity and a low attenuation factor.

IPC 1-7

H02P 7/63

IPC 8 full level

H02P 27/06 (2006.01)

CPC (source: EP US)

H02P 27/06 (2013.01 - EP US); **H03K 17/18** (2013.01 - EP US); **H03K 17/691** (2013.01 - EP US)

Citation (search report)

See references of WO 0227913A1

Designated contracting state (EPC)

DE FR GB IT

DOCDB simple family (publication)

WO 0227913 A1 20020404; CN 1237705 C 20060118; CN 1444793 A 20030924; DE 10048353 A1 20020502; DE 10048353 B4 20070426; EP 1320924 A1 20030625; US 2004080885 A1 20040429; US 7415072 B2 20080819

DOCDB simple family (application)

DE 0103575 W 20010917; CN 01813630 A 20010917; DE 10048353 A 20000929; EP 01982120 A 20010917; US 39808703 A 20030331