

Title (en)
CONTROL CARD FOR THE BRUSHLESS DIRECT CURRENT MOTOR

Title (de)
STEUERKARTE FÜR EINEN BÜRSTENLOSEN GLEICHSTROMMOTOR

Title (fr)
CARTE DE COMMANDE POUR MOTEUR À COURANT CONTINU SANS BALAIS

Publication
EP 2514090 A1 20121024 (EN)

Application
EP 10787149 A 20101213

Priority
• TR 200909436 A 20091215
• EP 2010069484 W 20101213

Abstract (en)
[origin: WO2011073127A1] The present invention relates to a motor control card (1) used for controlling the brushless direct current (BLDC) motors, having a three-phase inverter (3) which transforms direct current received from the AC-DC converter (2) to three phase current by means of the transistors, a sensing unit (4) that detects the rotor position, a microprocessor (5) that provides speed control of the motor (M) by generating pulse width modulation PWM signals having suitable duty cycle by means of the PI algorithm included in its software. The microprocessor (5) applies a PWM signal generated thereby by increasing the duty cycle within the commutation (X) duration wherein the current applied to the motor (M) is transferred from one phase to the other phase in the three phase inverter (3), in order to reduce torque oscillations and therefore motor noise. The brushless direct current (BLDC) motors are used in household appliances like dishwashers or washing machines.

IPC 8 full level
H02P 6/10 (2006.01); **H02P 7/29** (2006.01)

CPC (source: EP)
H02P 6/10 (2013.01); **H02P 7/29** (2013.01)

Citation (search report)
See references of WO 2011073127A1

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)
WO 2011073127 A1 20110623; CN 102714476 A 20121003; CN 102714476 B 20150819; EP 2514090 A1 20121024

DOCDB simple family (application)
EP 2010069484 W 20101213; CN 201080057302 A 20101213; EP 10787149 A 20101213