

Title (en)

IRONCORE LINEAR BRUSHLESS DC MOTOR WITH REDUCED DETENT FORCE

Title (de)

LINEAR-GLEICHSTROMMOTOR MIT EISENKERN UND REDUZIERTER REDUKTANZKRAFT

Title (fr)

MOTEUR LINEAIRE SANS BALAI A COURANT CONTINU ET A NOYAU DE FER PRESENTANT UNE FORCE DE DETENTE REDUITE

Publication

EP 1634362 A1 20060315 (EN)

Application

EP 04754235 A 20040602

Priority

- US 2004017582 W 20040602
- US 47674103 P 20030606

Abstract (en)

[origin: WO2004112224A1] A linear brushless DC motor is disclosed which provides reduced detent force by way of a stack (150) that features end teeth (152, 154) that are formed to be wedge shaped, and which has a length in the direction of motion which is approximately equal to $(N_p + 1/2) \times$ pole pitch, where N_p equals the number of poles covered by the armature of the brushless DC motor, and the pole pitch equals a distance between centers of two adjacent magnets (164) of opposite polarity in a field assembly (162) of the linear brushless DC motor.

IPC 1-7

H02K 41/035

IPC 8 full level

H02K 41/03 (2006.01)

CPC (source: EP KR)

H02K 41/02 (2013.01 - KR); **H02K 41/031** (2013.01 - EP); **H02K 41/035** (2013.01 - KR); **H02K 1/16** (2013.01 - EP); **H02K 1/18** (2013.01 - EP); **H02K 3/487** (2013.01 - EP); **H02K 2213/03** (2013.01 - EP)

Citation (search report)

See references of WO 2004112224A1

Citation (examination)

ES 2177428 A1 20021201 - INST CIENTIFICO TECNOL NAVARRA [ES]

Designated contracting state (EPC)

AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IT LI LU MC NL PL PT RO SE SI SK TR

DOCDB simple family (publication)

WO 2004112224 A1 20041223; CN 1799180 A 20060705; EP 1634362 A1 20060315; JP 2006527576 A 20061130; KR 20060022260 A 20060309

DOCDB simple family (application)

US 2004017582 W 20040602; CN 200480015476 A 20040602; EP 04754235 A 20040602; JP 2006515155 A 20040602; KR 20057023406 A 20051206