

(43) International Publication Date
16 February 2012 (16.02.2012)

(51) International Patent Classification:

H02P 6/24 (2006.01) H02P 3/02 (2006.01)
H02P 21/00 (2006.01)

(21) International Application Number:

PCT/IB2011/053388

(22) International Filing Date:

29 July 2011 (29.07.2011)

(25) Filing Language:

English

(26) Publication Language:

English

(30) Priority Data:

1013479.9 11 August 2010 (11.08.2010) GB

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(81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM,

AO, AT, AU, AZ, BA, BB, BG, BH, BR, BW, BY, BZ, CA, CH, CL, CN, CO, CR, CU, CZ, DE, DK, DM, DO, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LY, MA, MD, ME, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PE, PG, PH, PL, PT, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, ST, SV, SY, TH, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW.

(84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LR, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AL, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HR, HU, IE, IS, IT, LT, LU, LV, MC, MK, MT, NL, NO, PL, PT, RO, RS, SE, SI, SK, SM, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Published:

- with international search report (Art. 21(3))
- before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments (Rule 48.2(h))

(88) Date of publication of the international search report:

10 January 2013

(54) Title: ELECTRIC MOTOR AND METHOD OF BRAKING USING AN ELECTRIC MOTOR

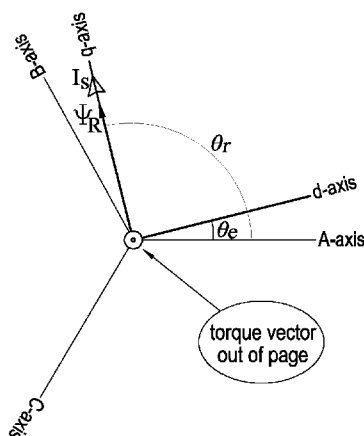


Fig.8

(57) Abstract: An electric motor comprising a stator having a plurality of coils, a rotor having a plurality of permanent magnets and a controller that is arranged to provide a voltage to the plurality of coils to generate a current through the coils that is defined by a stator current vector, wherein the controller is arranged to freeze the angle of the stator current vector unless the angle between the stator current vector and a rotor magnetic flux vector associated with the rotor magnets exceeds a predetermined value, wherein if the predetermined value is exceeded the controller is arranged to synchronised the movement of the stator current vector to the movement of the rotor magnetic flux vector.

INTERNATIONAL SEARCH REPORT

International application No
PCT/IB2011/053388

A. CLASSIFICATION OF SUBJECT MATTER
INV. H02P6/24 H02P21/00 H02P3/02
ADD.

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)
H02P

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

EPO-Internal

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
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Y	EP 1 950 879 A1 (TOSHIBA KK [JP]) 30 July 2008 (2008-07-30) paragraph [0021] - paragraph [0025] -----	5
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A	US 2004/178754 A1 (ANWAR MOHAMMAD NAZMUL [US] ET AL) 16 September 2004 (2004-09-16) abstract -----	1-8



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Date of the actual completion of the international search

13 November 2012

Date of mailing of the international search report

28/11/2012

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INTERNATIONAL SEARCH REPORT

Information on patent family members

International application No

PCT/IB2011/053388

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