



(51) International Patent Classification:
H02K 41/03 (2006.01)

(21) International Application Number:
PCT/SG2008/000427

(22) International Filing Date:
7 November 2008 (07.11.2008)

(25) Filing Language: English

(26) Publication Language: English

(72) Inventors; and

(71) Applicants : LIM, Howe Yuen [SG/SG]; Blk 261a Senggang East Way, #14-422, Singapore 541261 (SG). GOH, Chai Meng [SG/SG]; Blk 408 Serangoon Ave. 1, #11-79, Singapore 550408 (SG). LEOW, Yong Peng [SG/SG]; Blk 432 Ang Mo Kio Ave 10, #12-1459, Singapore 560432 (SG).

(74) Agent: CHONG, Y F; PSA Building, P.O. Box 0399, Singapore 911144 (SG).

(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, 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, PG, PH, PL, PT, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, ST, SV, SY, 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, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HR, HU, IE, IS, IT, LT, LU, LV, MC, MT, NL, NO, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Declarations under Rule 4.17:

— of inventorship (Rule 4.17(iv))

Published:

— with international search report (Art. 21(3))

(54) Title: DUAL COIL LINEAR MOTOR WITH COMPENSATED COGGING AND ATTRACTION FORCE

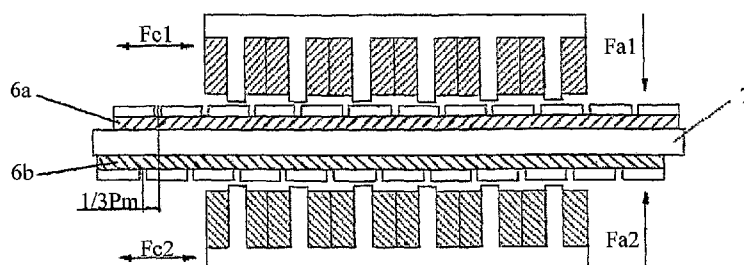


Fig 4

(57) Abstract: A dual coil linear motor with a first set of one or more linear motor coils (1a) assembled from the same reference position, to form a first magnet track assembly (6a), a second set of one or more linear motor coils (1b) assembled from the same reference position, to form a second magnet track assembly (6b). Each one or more linear motor coils in the first set (1a) is diametrically opposed and corresponds to each one or more linear motor coils of the second set (1b) and are offset by a distance of 1/3 the magnetic pitch, Pm. Alternatively, the magnet track assemblies (6a,6b) formed are offset from each other by the distance of 1/3 the magnetic pitch, Pm. In both embodiments, the dual coil linear motor produces net zero cogging force and attraction force.

