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(21) International Application Number: PCT/BR98/00107 (22) International Filing Date: 27 November 1998 (27.11.98) (30) Priority Data: PI 9706175.1 12 December 1997 (12.12.97) BR (71) Applicant (for all designated States except US): EMPRESA BRASILEIRA DE COMPRESSORES S.A. - EMBRACO [BR/BR]; Rua Rui Barbosa, 1020, CEP-89219-901 Joinville, SC (BR). (72) Inventors; and (75) Inventors/Applicants (for US only): DAINÉZ, Paulo, Sérgio [BR/BR]; Apartamento 902C, Rua Dr. João Collin, 2008, CEP-89219-901 Joinville, SC (BR). SCHWARZ, Marcos, Guilherme [BR/BR]; Rua General Osório, Conjunto Belvedere, Casa 2, CEP-89219-901 Joinville, SC (BR). (74) Agents: ARNAUD, Antonio, M., P. et al.; 7th floor, Rua José Bonifácio, 93, CEP-01003-901 São Paulo, SP (BR).		(81) Designated States: JP, KR, SG, SK, TR, US, European patent (AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE). Published <i>Without international search report and to be republished upon receipt of that report.</i>

(54) Title: A DRIVING CONTROL SYSTEM FOR ELECTRIC MOTORS**(57) Abstract**

A driving control system for electric motors, of the type used in refrigeration compressors and including: a power source (20) in direct current having, between positive (21) and negative (22) terminals of equal voltage, a median terminal (25), of null voltage, to which is directly connected a first coil (11) of the electric motor (10); an inverter (30) provided with N-1 commutation arms with opposite ends connected to the power source (20) and each including switch means, each commutation arm being medianly connected to a respective coil; and a control unit (40) operating the switch means, as a function of the signals received from a position sensor means (50), in order to determine

to said switch means, in each of a first and a second switching condition thereof, a switching frequency and a switch conduction period, which are defined in order to be effectively applied to the coils a voltage effectively corresponding to the speed and torque required for the motor.

