



INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(51) International Patent Classification ⁶: H02K 11/00	A1	(11) International Publication Number: WO 00/01054 (43) International Publication Date: 6 January 2000 (06.01.00)
(21) International Application Number: PCT/US99/14753 (22) International Filing Date: 29 June 1999 (29.06.99) (30) Priority Data: 60/091,257 30 June 1998 (30.06.98) US (71) Applicant (for all designated States except US): GENERAL ELECTRIC COMPANY [US/US]; One River Road, Schenectady, NY 12345 (US). (72) Inventors; and (75) Inventors/Applicants (for US only): WRIGHT, Kamron, M. [US/US]; 9612 Sea Pines, Fort Waynes, IN 46819 (US). LYTLB, Peter, B. [US/US]; 7711 Weymouth Court, Fort Wayne, IN 46825 (US). YOUNG, Andrew, N. [US/US]; 5733 Spring Meadow Drive, Roanoke, VA 24018 (US). (74) Agent: BEULICK, John, S.; Armstrong Teasdale LLP, Suite 2600, One Metropolitan Square, St. Louis, MO 63102-2740 (US).		(81) Designated States: AL, AM, AT, AT (Utility model), AU (Petty patent), AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, CZ (Utility model), DE, DE (Utility model), DK, DK (Utility model), EE, EE (Utility model), ES, FI, FI (Utility model), GB, GE, GH, GM, HU, ID, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SK (Utility model), SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZW, ARIPO patent (GH, GM, KE, LS, MW, SD, SL, SZ, UG, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG). Published <i>With international search report.</i>

(54) Title: MOTOR ENDSHIELD ASSEMBLY FOR AN ELECTRONICALLY COMMUTATED MOTOR

(57) Abstract

An endshield assembly (100) for an electronically commutated motor includes an endshield (100), a control assembly (104) and a power assembly (106). The endshield (100) includes a plurality of recessed fins (132) on an outer surface, and a substantially flat raised portion on an internal surface. The raised portion is in contact with a thermal pad (112). The control assembly (104) includes the thermal pad (112) and a control board (108) on which is located a plurality of power transistors (110). The thermal pad (112) provides thermal contact between the transistors (110) and the endshield (100) to enable the endshield (100) to dissipate heat from the transistors (110). The transistors (110) include a plurality of leads (128) that extend substantially parallel to the control board (108) which enable the leads (128) to be coated for protection against harsh environments. The power assembly (106) includes a power board (138) having an insulator (146) positioned between the power board (138) and the control board (108).

