(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property Organization
International Bureau

(43) International Publication Date
23 November 2006 (23.11.2006)

PCT

(10) International Publication Number
WO 2006/125152 A3

(51) International Patent Classification:
F28F 7/00 (2006.01)

(21) International Application Number:
PCT/US2006/019442

(22) International Filing Date: 18 May 2006 (18.05.2006)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
60/682,500 19 May 2005 (19.05.2005) US

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(81) Designated States *(unless otherwise indicated, for every kind of national protection available)*: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, LY, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

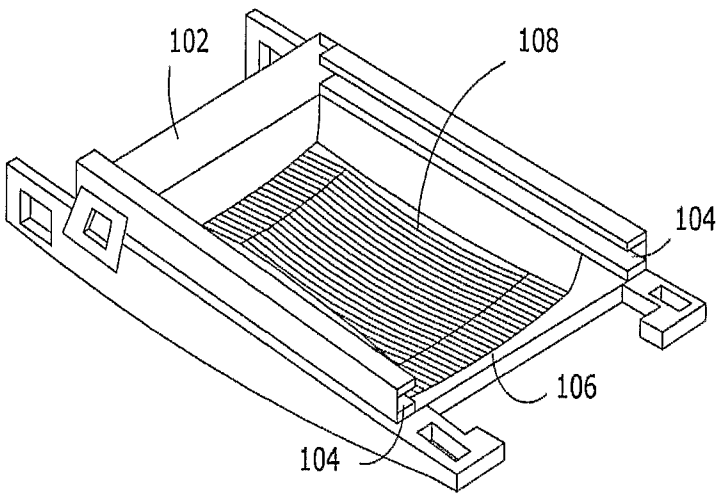
(84) Designated States *(unless otherwise indicated, for every kind of regional protection available)*: ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Published:
— *with international search report*
— *before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments*

(88) Date of publication of the international search report:
22 February 2007

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: THERMAL LAMINATION MODULE



(57) Abstract: The present invention discloses a thermal laminate for dissipating heat generated in the vicinity of an installed PCMCIA card. The thermal laminate includes top film, middle gap filler and bottom layers. The top film layer provides a protective, non-resistive, low friction surface with a soft conformal interface for enhancing the workability of the thermal laminate. The middle gap filler layer is disposed underneath the top film layer and provides a conformal thermal pathway for the heat radiation emitted from the PCMCIA card. The bottom layer is disposed underneath the middle gap filler layer and provides a grip to the middle gap filler and top film layers. The bottom layer is made from either a thermal adhesive layer or a copper foil layer. The thermal laminate utilizes sliding contacts for proper housing between PCMCIA card and heat sink surfaces to provide better thermal management.

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INTERNATIONAL SEARCH REPORT

International application No.
PCT/US 06/19442

A. CLASSIFICATION OF SUBJECT MATTER
IPC(8) - F28F 7/00 (2006.01)
USPC - 165/80.2
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)
165/80.1, 80.2, 133, 134.1, DIG134; 428/41.7, 41.8, 53, 32, 68, 374, FOR 144; 174/377.1; 427/592; 257/701, 706, 709

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)

UCPTO WEST(USPGPUB, USPT, EPAB, JPAB)
Search Terms used: top film or middle and layer, heat or sink, cool or high and power, dissipation, thermal or management, electrical or device, thermal or lamination and module, device or PCMCIA, thermal lamination, assembli$5 or thermal and laminat$3, heat sink,

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X ----- Y	US 5550326 A (Kesel) 27 August 1996 (27.08.1996), Abstract; col 1, lines 58-67; col. 2, lines 11-67; col. 3, lines 1-67; col. 4, lines 28-47; col. 5, lines 1-10; and Figs. 2-4.	1, 3-7, 10-12, 15, 17-21, 24 and 26-27 ---------- 2, 8-9, 13-14, 16, 22-23, 25, and 28-30
Y	US 6705388 B1 (Sorgo) 16 Mar 2004 (16.03.2004), col. 1, lines 21-67; col. 2, lines 11-67; and col. 10, lines 21-27.	2, 16, 25 and 30
Y	US 5679457 A (Bergerson) 21 October 1997 (21.10.1997), Examples 1-5 on col. 3, line 46 - col. 6, line 9.	8-9, 13-14, 22-23, and 28-29
A	US 6131646 A (Kelley) 17 October 2000 (17.10.2000)	1-30
A	US 4794981 A (Mizuno) 03 January 1989 (03.01.1989)	1-30

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Date of the actual completion of the international search	Date of mailing of the international search report
23 October 2006 (23.10.2006)	14 DEC 2006
Name and mailing address of the ISA/US Mail Stop PCT, Attn: ISA/US, Commissioner for Patents P.O. Box 1450, Alexandria, Virginia 22313-1450 Facsimile No. 571-273-3201	Authorized officer: Lee W. Young PCT Helpdesk: 571-272-4300 PCT OSP: 571-272-7774

Form PCT/ISA/210 (second sheet) (April 2005)