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International Bureau

INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(51) International Patent Classification 7 : H01L 23/373, 23/36, 25/065 | A1

(11) International Publication Number: WO 00/63968

(43) International Publication Date: 26 October 2000 (26.10.00)

(21) International Application Number: PCT/US00/10561

(22) International Filing Date: 19 April 2000 (19.04.00)

(30) Priority Data:
09/295,081 20 April 1999 (20.04.99) US

(71) Applicant *(for all designated States except US)*: TYCO ELECTRONICS CORPORATION [US/US]; 2901 Fulling Mill Road, Middletown, PA 17057–3163 (US).

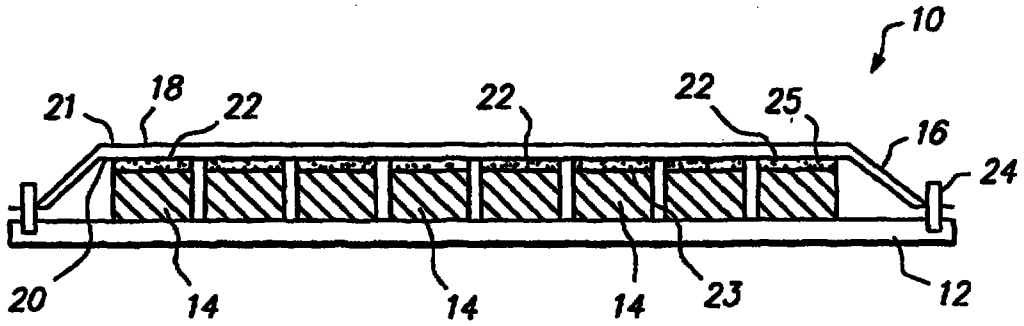
(72) Inventors; and
(75) Inventors/Applicants *(for US only)*: SCHOENSTEIN, Paul, G. [US/US]; 1727 Kentucky Street, Redwood City, CA 94061 (US). SITLER, Benjamin, L. [US/US]; 1410 Miravalle Avenue, Los Altos, CA 94024 (US). REAMEY, Robert, H. [US/US]; 2680 Ramona Street, Palo Alto, CA 94306 (US). VOGDES, Christine, E. [US/US]; 1340 Nelson Way, Sunnyvale, CA 94087 (US).

(74) Agent: NOVACK, Sheri, M.; Tyco Electronics Corporation, Intellectual Property Law Department, 300 Constitution Drive, MS 106/1B, Menlo Park, CA 94025–1164 (US).

(81) Designated States: JP, KR, MX, SG, US, European patent (AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE).

Published
With international search report.

(54) Title: DISSIPATION OF HEAT FROM A CIRCUIT BOARD HAVING BARE SILICON CHIPS MOUNTED THEREON



(57) Abstract

A method is disclosed for making a heat dissipation arrangement for a circuit board on which are mounted bare silicon chips having an exposed face. A heat spreader has a planar portion, on whose inner face (facing the circuit board) are applied one or more pads of a gel composition. The pad(s) are positioned opposite the bare silicon chips when the heat spreader is attached to the circuit board and completely cover the exposed faces of the chips. The gel composition has a cohesive strength greater than its adhesive strength, has a compression modulus of less than 1.38 MPa, and has a thermal conductivity greater than 1.0 W/m–°C, and a thickness of between about 0.08 mm and about 1.0 mm. The low compression modulus of the gel material protects the chips from the transmission of mechanical stresses thereto.