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

CORRECTED VERSION

(19) World Intellectual Property Organization
International Bureau

(43) International Publication Date
14 October 2004 (14.10.2004)

PCT

(10) International Publication Number
WO 2004/088727 A3

(51) International Patent Classification[7]: H01L 23/498

(21) International Application Number:
PCT/IB2004/001734

(22) International Filing Date: 2 April 2004 (02.04.2004)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
60/459,353 2 April 2003 (02.04.2003) US

(71) Applicants *(for all designated States except US)*: **UNITED TEST AND ASSEMBLY CENTER LTD.** [SG/SG]; 5 Serangoon North Avenue 5, 554916, Singapore (SG). **INFINEON, TECHNOLOGIES** [DE/DE]; Balanstrasse 73, 81541 Munich (DE).

(72) Inventors; and

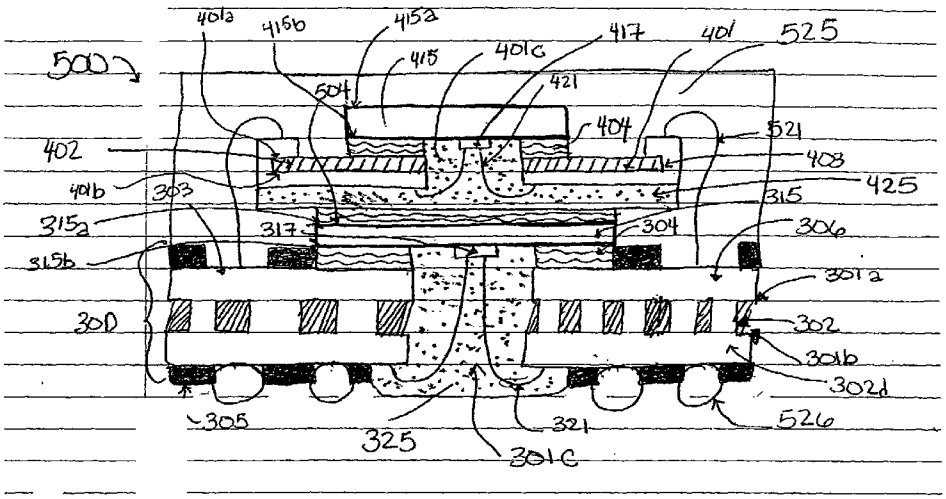
(75) Inventors/Applicants *(for US only)*: **CHEN, Fung, Leng** [SG/SG]; Blk 475 Sembawang Drive #07-319, 750475 Singapore (SG). **KIM, Seong, Kwang, Brandon** [KR/KR]; Castle Green, Blk 487, #05-13, Yio Chu Kang Road S (KR). **CHA, Wee, Lim** [SG/SG]; 955 Upper Serangoon Road S (SG). **SUN, Yi-Sheng, Anthony** [SG/SG]; 19 Fort Road #07-04 S (TW). **HETZEL, Wolfgang** [DE/DE]; Schanzenweg 14, 89564 Nattheim (DE). **THOMAS, Jochen** [DE/DE]; Ottilienstr. 46 A, 81827 Munich (DE).

(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, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, 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, 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,

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(54) Title: MULTI-CHIP BALL GRID ARRAY PACKAGE AND METHOD OF MANUFACTURE



(57) Abstract: A BGA package (500) is disclosed including a base IC structure (300) having a base substrate (302), with an opening (301c) running lengthwise therethrough. A first semiconductor chip (315) is mounted face-down on the base substrate (301) so that the bond pads (317) thereof are accessible through the opening (301c). The package (500) also includes a secondary IC structure (400) including a secondary substrate (401), having an opening (401c) running there through, and a second semiconductor chip (415). The second chip (415) is mounted face-down on the secondary substrate (401) so that the bond pads (417) thereof are accessible through the opening (401c) in the secondary substrate (401). An encapsulant (425) fills the opening (401c) in the secondary substrate (401) and forms a substantially planar surface (425a) over the underside of the secondary substrate (401). The substantially planar surface (425a) is mounted to the first chip (315) of the base IC structure (300) through an adhesive (504). Wires (521) connect a conductive portion (406) of the secondary IC structure (400) to a conductive portion (303) of the base IC structure (300).

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GB, GR, HU, IE, IT, LU, 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*

(88) Date of publication of the international search report:
11 November 2004

(48) Date of publication of this corrected version:
29 December 2004

(15) Information about Correction:
see PCT Gazette No. 53/2004 of 29 December 2004, Section II

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.