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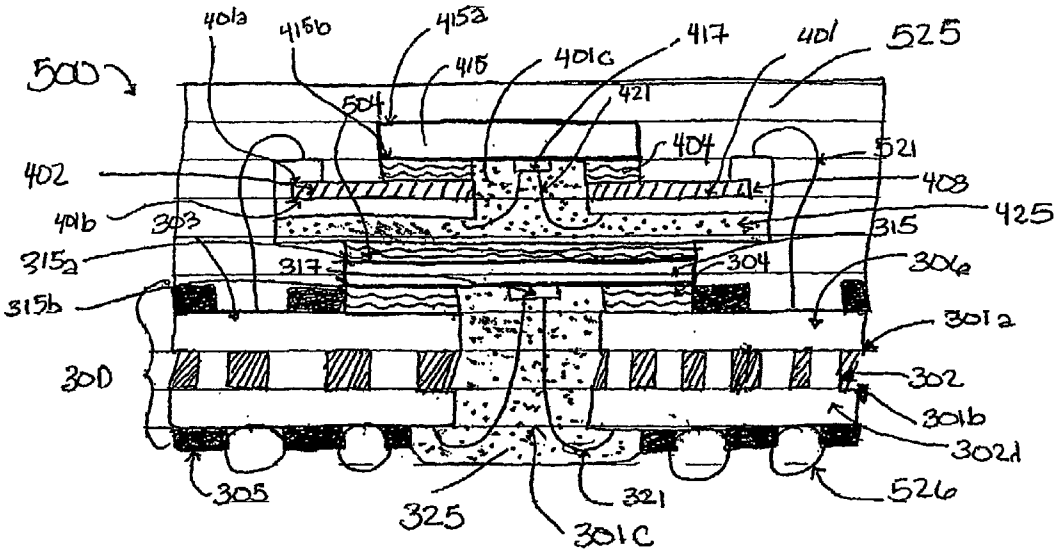
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(54) Title: MULTI-CHIP BALL GRID ARRAY PACKAGE AND METHOD OF MANUFACTURE



(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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