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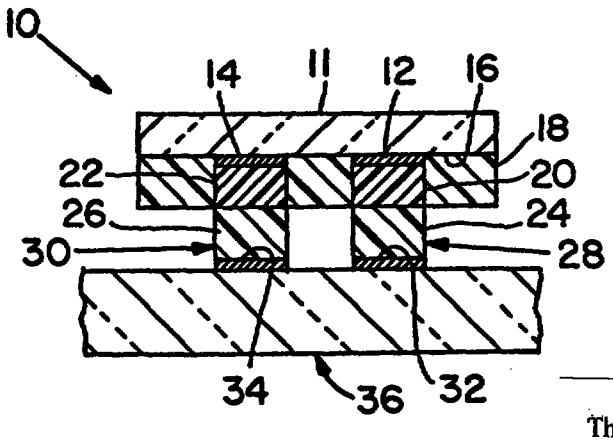
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(54) Title: FLIP CHIP TECHNOLOGY USING ELECTRICALLY CONDUCTIVE POLYMERS AND DIELECTRICS



This Sheet Has Been Replaced

(57) Abstract

A method is presented for interconnecting bond pads of a flip chip with bond pads of a substrate by an electrically conductive polymer. An organic protective layer is selectively formed over a surface of a flip chip to thereby leave exposed bond pads on the flip chip. An electrically conductive polymerizable precursor is disposed on the bond pads extending to a level beyond the organic protective layer to thereby form bumps. The bumps are aligned with bond pads of a substrate and then contacted to those bond pads. The bumps can be polymerized either before or after contacting the bumps to the bond pads of the substrate to form electrically conductive interconnections between the bond pads of the flip chip and the bond pads of the substrate.