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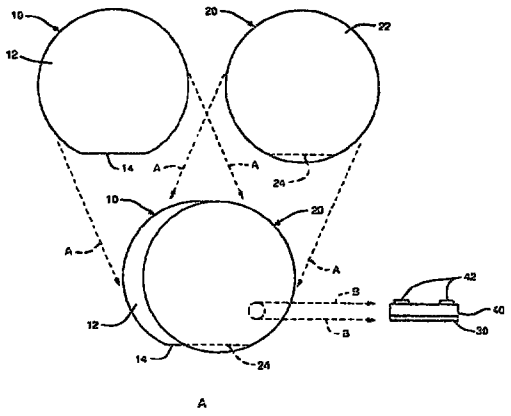
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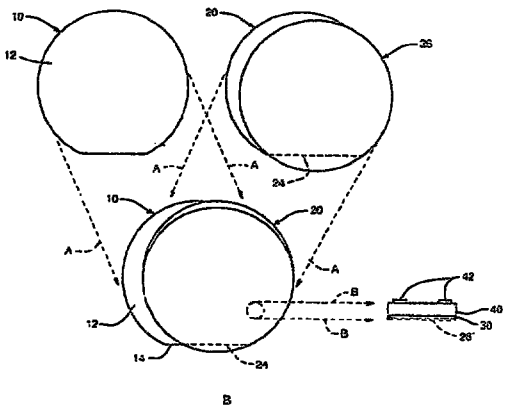
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(54) Title: WAFER LEVEL APPLICATION OF TACK-FREE DIE-ATTACH ADHESIVE FILM



A



B

(57) Abstract: A tack-free film (20) of die-attach adhesive is tacked to a semiconductor wafer (10) at the wafer level and the wafer is thereafter excised into individual semiconductor die (40) each having a tack-free die-attach adhesive preform (30) thereon. The die may be tacked to an electronic package (110) or substrate by the die-attach adhesive preform and does not need to be clamped in place during subsequent curing. The die-attach adhesive is dry to the touch, i.e. tack-free in its dry or B-staged condition and includes both thermosetting and thermoplastic adhesive, may be insulating, electrically conductive, anisotropic electrically conductive and/or thermally conductive, and may include a sacrificial layer.

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