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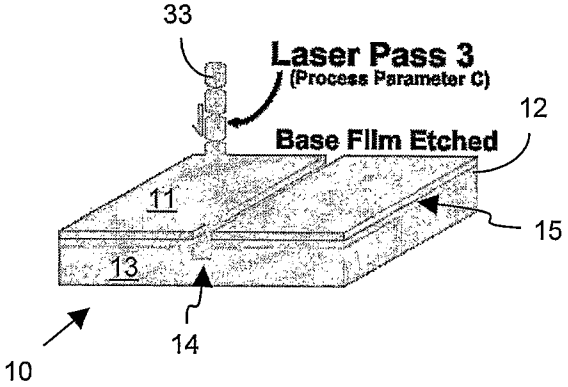
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(54) Title: DIE BONDING



(57) Abstract: A die bonding method and apparatus by which a wafer substrate 11 adhered to a carrier tape 13 by an adhesive layer 12 is laser machined through the wafer substrate and through the adhesive layer at most to scribe the carrier tape to form a singulated die 15 with an attached singulated adhesive layer, without substantial delamination of the adhesive layer 12 and carrier tape 13 or substantial production of burrs from the adhesive layer 12. The carrier tape 13 is cured, preferably by ultraviolet light, to release the adhesive layer from the carrier tape. The singulated die is picked and placed on a die pad and the adhesive layer 12 is cured, preferably by heat, to adhere the die to the die pad.

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