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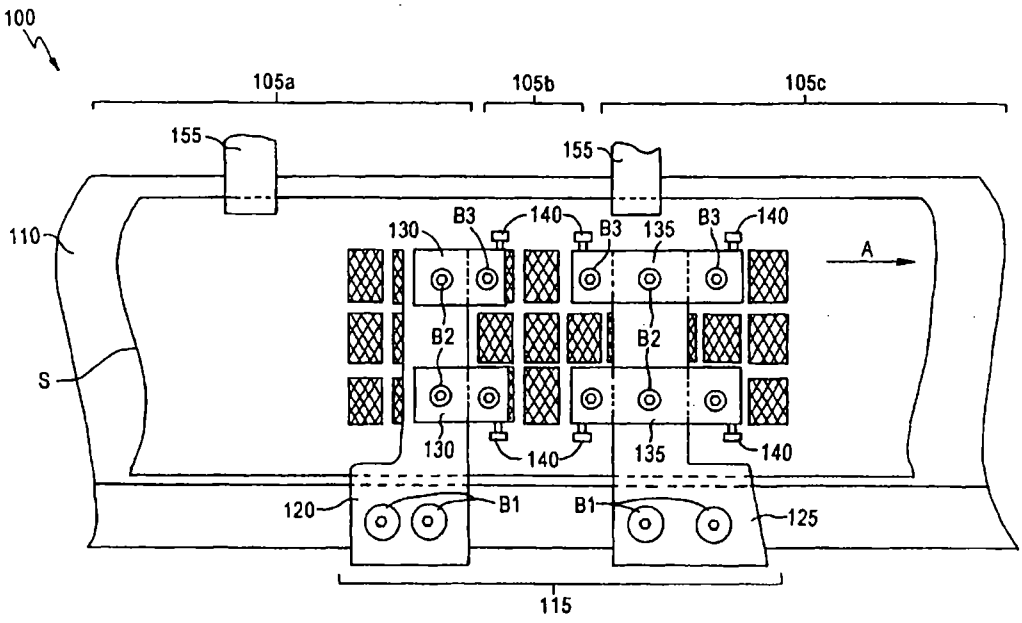
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(54) Title: MECHANICAL CLAMPER FOR HEATED SUBSTRATES AT DIE ATTACH



(57) Abstract: An apparatus is provided wherein a substrate is mechanically clamped to a heater block of a die bonder to hold down the heated substrate before and during the die bonding operation, thereby preventing warpage of the substrate. Embodiments include a clamp comprising a plurality of spring-loaded rollers which push down opposing outer edges of the substrate onto the heater block while the substrate is being heated and die bonded. The clamp minimizes warpage of the substrate by pushing the substrate flat onto the heater block, and allows the substrate to be moved into and away from the die bonding area.

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