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(54) Title: LASER-RELEASABLE BONDING MATERIALS FOR 3-D IC APPLICATIONS

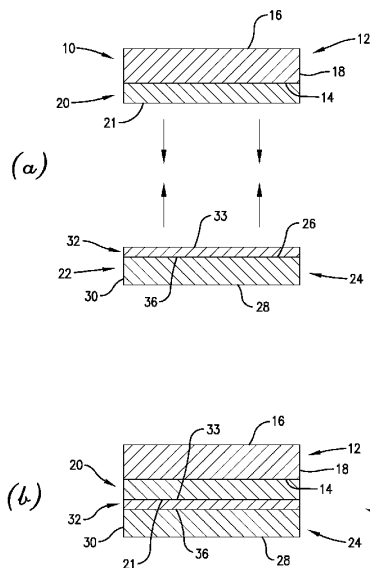


Fig. 1.

(57) Abstract: Novel polyketanil-based compositions for use as a laser-releasable composition for temporary bonding and laser debonding processes are provided. The inventive compositions can be debonded using various UV lasers, at wavelengths from about 300 nm to about 360 nm, leaving behind little to no debris. The layers formed from these compositions possess good thermal stabilities and are resistant to common solvents used in semiconductor processing. The compositions can also be used as build-up layers for redistribution layer formation.

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