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(54) Title: METHOD FOR CURING AND RELEASING THERMOSETTING POLYMERS ON A COATED GLASS SUBSTRATE

(57) Abstract: A method for curing thermosetting polymers on a glass substrate is disclosed. A light-absorbing layer is deposited on a glass substrate, and a thermosetting polymer precursor is then deposited on the light-absorbing layer in liquid form. After the thermosetting polymer precursor has been preheated, the thermosetting polymer precursor is then exposed to a light pulse from a flashlamp while it is being cooled simultaneously in order to maintain an average temperature of the thermosetting polymer precursor at below its maximum working temperature. After the thermosetting polymer precursor has been exposed to the light pulse, a gaseous by-product is allowed to dissipate from the thermosetting polymer precursor. The light pulse exposure step and the by-product dissipation step are repeated multiple times until a thermosetting polymer thin film is formed. Afterwards, the thermosetting polymer film is released from the light-absorbing layer.



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