ENHANCEMENT OF ULTRAVIOLET CURING OF TENSILE STRESS LINER USING REFLECTIVE MATERIALS

ABSTRACT

A method of manufacturing a semiconductor device begins by fabricating an n-type metal oxide semiconductor (NMOS) transistor structure on a semiconductor wafer. The method continues by forming an optically reflective layer overlying the NMOS transistor structure, forming a layer of tensile stress inducing material overlying the optically reflective layer, and curing the layer of tensile stress inducing material by applying ultraviolet radiation. Some of the ultraviolet radiation directly radiates the layer of tensile stress inducing material and some of the ultraviolet radiation radiates the layer of tensile stress inducing material by reflecting from the optically reflective layer.

FIG. 6