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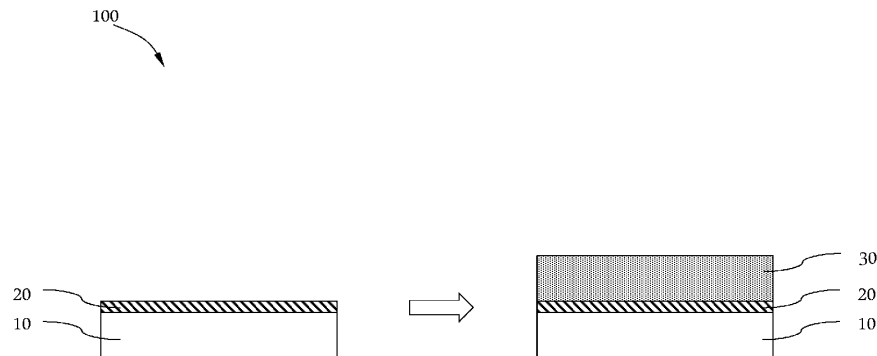


FIG. 1

(57) Abstract: A graphene barrier layer is disclosed. Some embodiments relate to a graphene barrier layer capable of preventing diffusion from a fill layer into a substrate surface and/or vice versa. Some embodiments relate to a graphene barrier layer that prevents diffusion of fluorine from a tungsten layer into the underlying substrate. Additional embodiments relate to electronic devices which contain a graphene barrier layer.

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