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(54) Title: METHOD FOR MANUFACTURING A SEMICONDUCTOR STRUCTURE

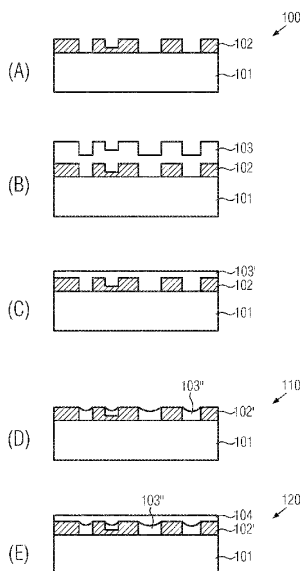


FIG. 1

(57) Abstract: The present invention relates to a method for manufacturing a semiconductor structure and to a photonic device, wherein the method comprising the steps of: providing a silicon nitride patterned layer (102) over a carrier substrate (101); providing a first layer of a conformal oxide (103) on the silicon nitride patterned layer (102) such that it fully covers said silicon nitride patterned layer; and planarizing the first layer of conformal oxide (103) to a predetermined thickness above the silicon nitride patterned layer (102) to form a planarizing oxide layer (103'). After the step of planarizing the first layer of conformal oxide (103), the method further comprises steps of clearing the silicon nitride patterned layer (102) to form a dished silicon nitride patterned layer (102') with a dishing height; and, subsequently, providing a second layer of a conformal oxide (104) on or over the dished silicon nitride layer (102').

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