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(54) Title: FLEXIBLE MONOMER FOR SMOOTH POLYMER SURFACE

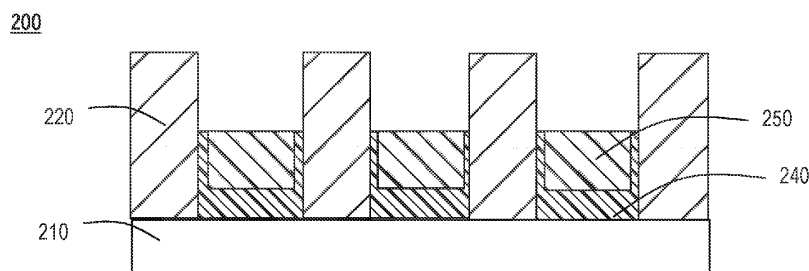


FIG. 5

(57) Abstract: Embodiments of the disclosure relate to methods of selectively depositing a metal after use of a flowable polymer to protect a substrate surface within a feature. A first metal layer is deposited by physical vapor deposition (PVD). The semiconductor substrate surface is exposed to one or more monomers to form a flowable and flexible polymer film on the first metal layer within the at least one feature. The flowable polymer film forms on the first metal layer on the bottom. The one or more monomers are selected from one or more of amines with bi-functional groups, aldehydes with bi-functional groups, cyanates with bi-functional groups, ketones with bi-functional groups, and alcohols with bi-functional groups. At least a portion of the first metal layer is selectively removed from the top surface and the at least one sidewall. The flowable polymer film is removed.



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