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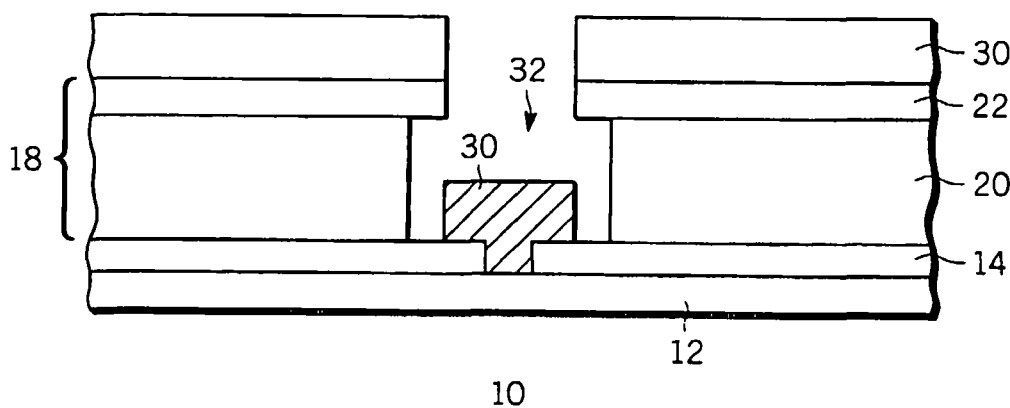
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(54) Title: TIERED STRUCTURE HAVING A MULTI-LAYERED RESIST STACK



(57) Abstract: An improved and novel method of forming a tiered structure (10), such as a T-gate structure, including the fabrication of a stabilized resist layer (14) that provides for the prevention of interlayer intermixing with the deposition of subsequent resist layers. The method includes patterning a base resist layer (14) to provide for an opening (16) which will form the stem of the tiered structure and subsequently stabilizing the resist base layer without deforming the stem opening. Next, a resist stack (18) is deposited on an uppermost surface of the stabilized resist layer. Patterning the resist stack provides for an opening on an uppermost layer (22) or portion, and a reentrant profile in a portion of the resist stack adjacent the stabilized resist layer. Metallization and subsequent removal of the resist layers results in a tiered structure (32), such as a T-gate structure, formed using only low to medium molecular weight, linear polymeric materials such as those used in positive optical resists in optical lithography.



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