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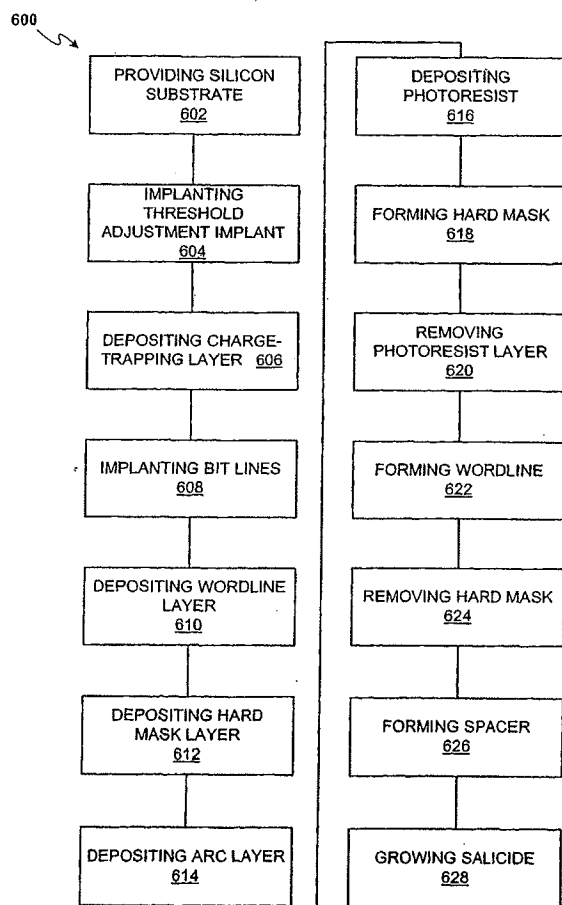
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(54) Title: **HARD MASK PROCESS FOR MEMORY DEVICE WITHOUT BITLINE SHORTS**



(57) Abstract: A manufacturing method for a MirrorBit[®] Flash memory includes providing a semiconductor substrate [102] [602] and depositing a charge-trapping dielectric layer [504] [606]. First and second bitlines [512] [608] are implanted and a wordline layer [515] is deposited [610]. A hard mask layer [516] is deposited over the wordline layer [515] [612]. The hard mask layer [516] is of a material formulated for removal without damaging the charge-trapping dielectric layer [504]. A photoresist [518] is deposited over the wordline layer [515] and used to form a hard mask [519] [618]. The photoresist [518] is removed [620]. The wordline layer [515] is processed using the hard mask [519] to form a wordline [525-528].

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