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— *as to the applicant's entitlement to claim the priority of the earlier application (Rule 4.17(iii)) for all designations*

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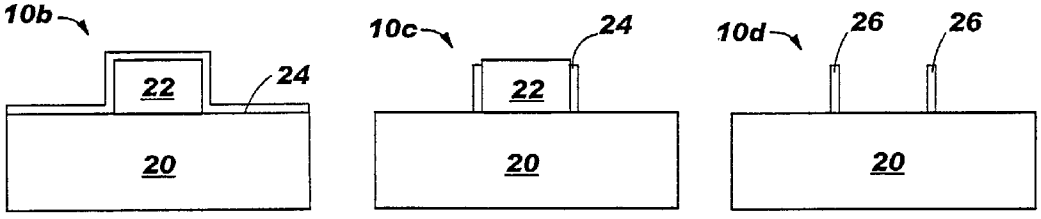
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(54) Title: METHOD OF FORMING FREESTANDING SEMICONDUCTOR LAYER



(57) Abstract: A method of providing a freestanding semiconductor layer (26) on a conventional SOI or bulk-substrate silicon device includes forming an amorphous or polycrystalline mandrel (22) on a monocrystalline base structure (20). A conformal polycrystalline semiconductor layer (24) is then formed on the mandrel (22) and on the base structure (20), wherein the polycrystalline layer (24) contacts the base structure (20). The polycrystalline semiconductor layer (24) is then recrystallized so that it has a crystallinity substantially similar to that of the base structure (20). Thus, a freestanding semiconductor layer (26) is formed with a high degree of control of the thickness and height thereof and maintaining a uniformity of thickness.

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