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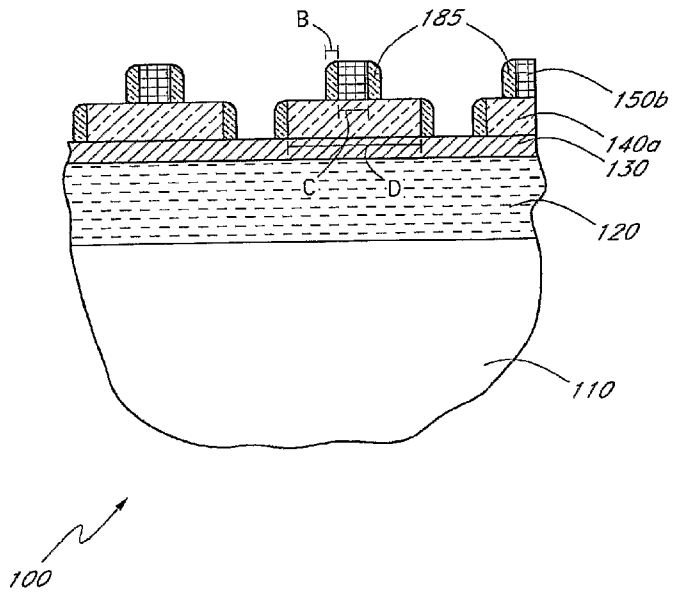
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(54) Title: SINGLE SPACER PROCESS FOR MULTIPLYING PITCH BY A FACTOR GREATER THAN TWO AND RELATED INTERMEDIATE IC STRUCTURES



(57) Abstract: Single spacer processes for multiplying pitch by a factor greater than two are provided. In one embodiment, n, where $n \geq 2$, tiers of stacked mandrels (150b), (140a) are formed over a substrate, each of the n tiers comprising a plurality of mandrels (150b), (140a) substantially parallel to one another. Mandrels (150b) at tier n are over and parallel to mandrels (140a) at tier n-1, and the distance between adjoining mandrels at tier n is greater than the distance between adjoining mandrels at tier n-1. Spacers (185) are simultaneously formed on sidewalls of the mandrels (150b), (140a). Exposed portions of the mandrels (150b), (140a) are etched away and a pattern of lines defined by the spacers (185) is transferred to the substrate (110).

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