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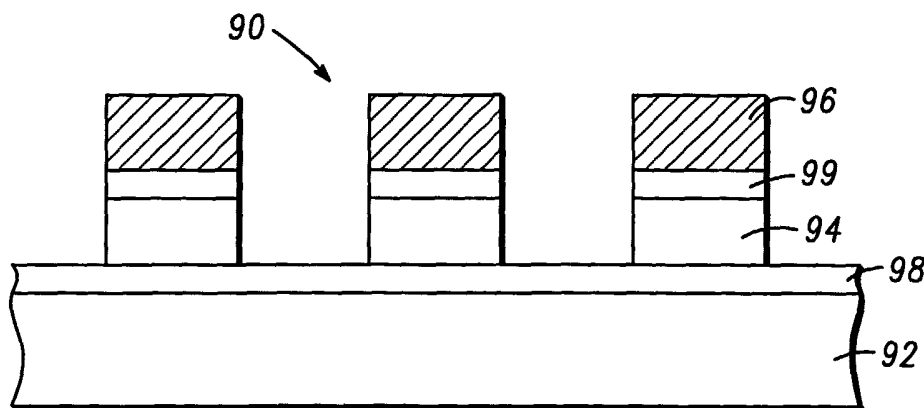
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(54) Title: GROWTH OF COMPOUND SEMICONDUCTOR STRUCTURES ON PATTERNED OXIDE FILMS



(57) Abstract: Compound semiconductor structures (96) and devices can be grown on patterned oxide layers (94) deposited on silicon (92). The deposition of Group II-VI and Group III-V compound semiconductors on patterned wafers results in an increase in the critical thickness for lattice mismatched layers and the relief of strain energy through side walls. As a result, high crystalline quality compound semiconductor material can be grown on less expensive and more accessible substrate to more cost effectively produce semiconductor components and devices having enhanced reliability.



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INTERNATIONAL SEARCH REPORT

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A. CLASSIFICATION OF SUBJECT MATTER
IPC 7 H01L21/20 H01L21/8258 H01L21/336 H01L21/28

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED
Minimum documentation searched (classification system followed by classification symbols)
IPC 7 H01L C30B

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)
PAJ, EPO-Internal, WPI Data

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