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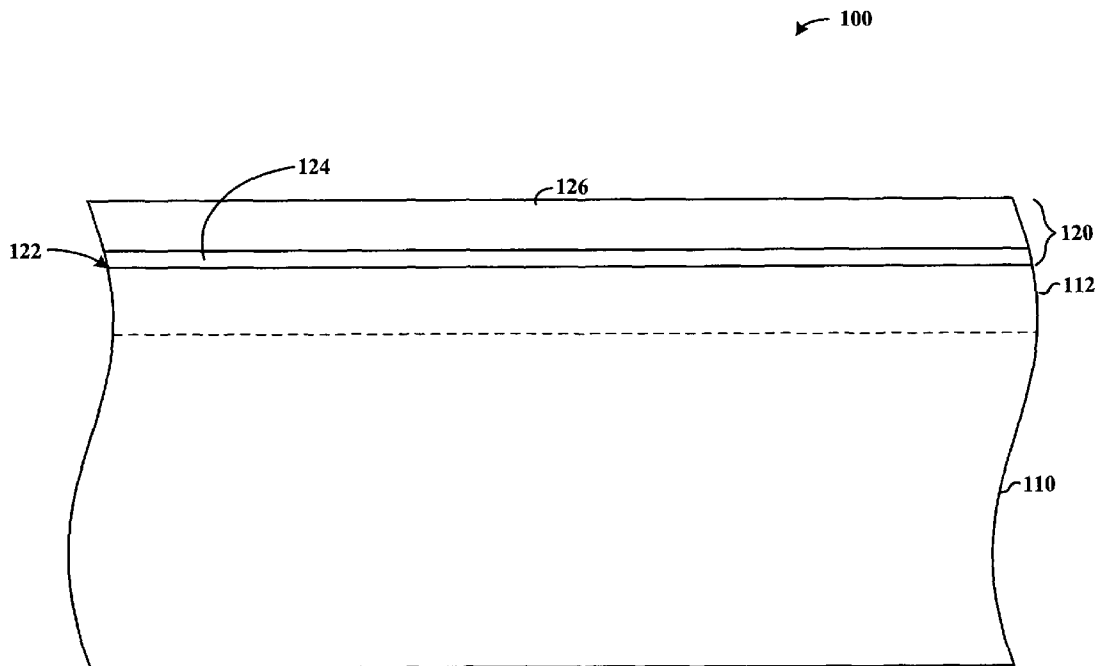
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(54) Title: GERMANIUM SUBSTRATE-TYPE MATERIALS AND APPROACH THEREFOR



(57) Abstract: Germanium circuit-type structures are facilitated. In one example embodiment, a multi-step growth and anneal process is implemented to grow Germanium (Ge) containing material, such as heteroepitaxial-Germanium, on a substrate including Silicon (Si) or Silicon-containing material. In certain applications, defects are generally confined near a Silicon/Germanium interface, with defect threading to an upper surface of the Germanium containing material generally being inhibited. These approaches are applicable to a variety of devices including Germanium MOS capacitors, pMOSFETs and optoelectronic devices.



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 USPC: 257/63;117/88  
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**B. FIELDS SEARCHED**  
 Minimum documentation searched (classification system followed by classification symbols)  
 U.S. : 257/63;117/88

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 practicable, search terms used)

**C. DOCUMENTS CONSIDERED TO BE RELEVANT**

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X --- Y	US 6,537,370 (Hernandez et al.) 25 March 2003 (25.03.2003), col. 3, lines 5-col. 8, line 29, and figures 1-6.  US 6,787,805 (Takizawa et al.) 07 September 2004 (07.09.2004), figures 2-5; col. 5, lines 20-25.	1-6, 9-11, 13-30 ----- 7-8, 12

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