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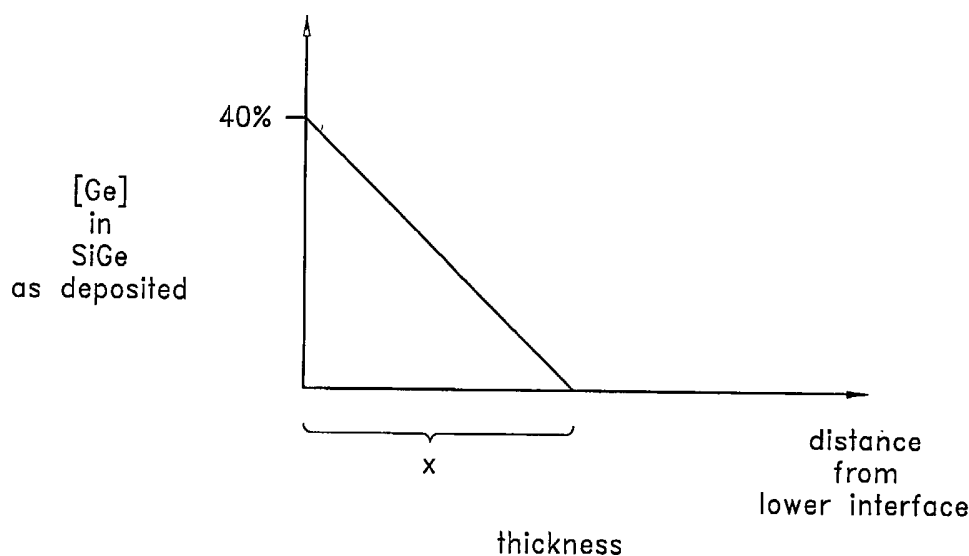
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(54) Title: SIGE RECTIFICATION PROCESS



(57) Abstract: A method for forming strain-relaxed SiGe films comprises depositing a graded strained SiGe layer on a substrate in which the concentration of Ge is greater at the interface with the substrate than at the top of the layer (Figure 1). The strained SiGe film is subsequently oxidized, producing a strain-relaxed SiGe film with a substantially uniform Ge concentration across the thickness of the film. The relaxed SiGe layer may be used to form a strained silicon layer on a substrate.

INTERNATIONAL SEARCH REPORT

International application No.

PCT/US04/07386

A. CLASSIFICATION OF SUBJECT MATTER

IPC(7) : H01L 21/20

US CL : 438/494, 496, 507, 770

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)

U.S. : 438/478, 493, 494, 496, 500, 507, 770; 257/E21.092, E21.102, E21.115

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)
USPAT; US PG PUBS; Derwent; EPO; JPO; IBM TDB

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	Y. S. Lim et al., "Dry Thermal Oxidation of a Graded SiGe Layer," Appl. Phys. Lett., Vol. 79, No. 22, pp. 3606-3608, 26 November 2001, whole document.	1-25
A	US 2002/0168802 A1 (Hsu et al.) 14 November 2002 (14.11.2002), Fig. 8 and paragraphs [0020] to [0032].	1-25
A, E	US 6,825,086 B2 (Lee et al.) 30 November 2004 (30.11.2004), Fig. 11a and column 2, line 46 to column 5, line 50.	1-25
A, E	US 2005/0164473 A1 (Liu et al.) 28 July 2005 (28.07.2005), whole document.	1-25

☐ Further documents are listed in the continuation of Box C.

☐ See patent family annex.

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