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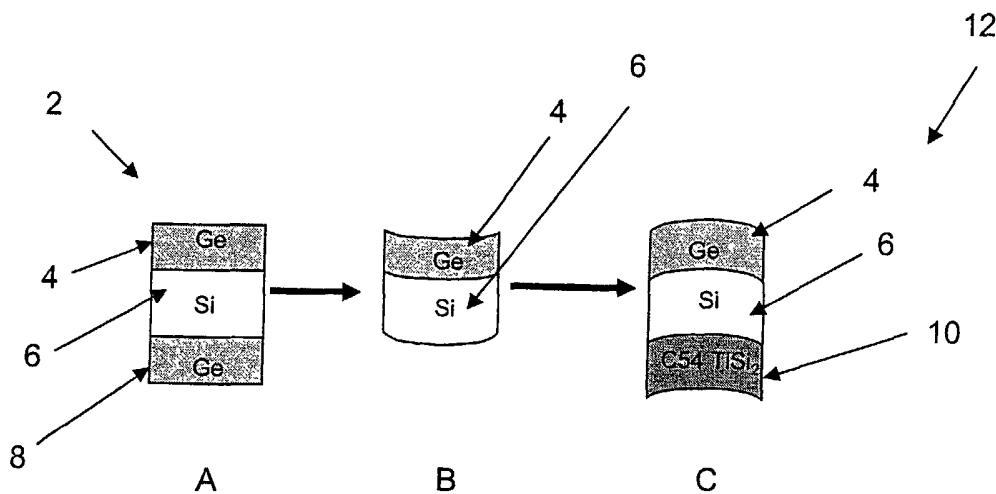
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- (74) Agents: **BELOBORODOV, Mark, L.** et al.; Goodwin Procter LLP, Exchange Place, Boston, MA 02109 (US).
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(54) Title: METHOD AND STRUCTURE OF STRAIN CONTROL OF SiGe BASED PHOTODETECTORS AND MODULATORS



(57) Abstract: A SiGe or Ge structure comprises a substrate and a SiGe or Ge layer that is formed on a first surface of the substrate. A silicidation or germanide layer is formed on a second surface of the substrate so to increase the tensile strain of the SiGe or Ge layer on the first surface.

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A. CLASSIFICATION OF SUBJECT MATTER  
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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)  
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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)  
EPO-Internal, INSPEC

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category °	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
P,X	WO 03/105189 A (AMBERWAVE SYSTEMS CORPORATION) 18 December 2003 (2003-12-18) page 17, lines 5-9 page 22, lines 21-23	1,7-10
P,X	WO 2004/001857 A (MASSACHUSETTS INSTITUTE OF TECHNOLOGY) 31 December 2003 (2003-12-31) claims; figure 1	27
A	CH. BUCHAL ET AL.: "Ultrafast Si-based MSM mesa photodetectors with optical waveguide connection" MATERIALS SCIENCE IN SEMICONDUCTOR PROCESSING, vol. 3, 2000, pages 399-403, XP001205581 abstract; figure 1	1-28
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Further documents are listed in the continuation of box C.

Patent family members are listed in annex.

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## INTERNATIONAL SEARCH REPORT

International Application No  
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## C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category °	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	BOYANOV B I ET AL: "Growth of epitaxial CoSi <sub>2</sub> on SiGe(001)" JOURNAL OF APPLIED PHYSICS, AMERICAN INSTITUTE OF PHYSICS. NEW YORK, US, vol. 86, no. 3, 1 August 1999 (1999-08-01), pages 1355-1362, XP012048329 ISSN: 0021-8979 abstract	1-28
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# INTERNATIONAL SEARCH REPORT

Information on patent family members

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