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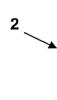
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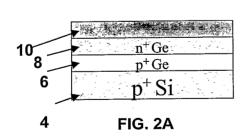
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(54) Title: METHOD AND STRUCTURE OF GERMANIUM LASER ON SILICON





(57) Abstract: A laser structure includes at least one active layer having doped Ge so as to produce light emissions at approximately 1550nm from the direct band gap of Ge. A first confinement structure is positioned on a top region of the at least one active layer. A second confinement structure is positioned on a bottom region the at least one active layer.

INTERNATIONAL SEARCH REPORT

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A. CLASSIFICATION OF SUBJECT MATTER INV. H01S5/32

ADD. H01S5/34

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B. FIELDS SEARCHED

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EPO-Internal, WPI Data, INSPEC, IBM-TDB

US 2005/082554 A1 (TORVIK JOHN T [US] TORVIK JOHN TARJE [US]) 21 April 2005 (2005-04-21) paragraphs [0005], [0025], [0026], [0029], [0047] claims 1,4 figure 2 US 5 548 128 A (SOREF RICHARD A [US] ET AL) 20 August 1996 (1996-08-20) column 1, lines 49-63 column 2, lines 28-58 claim 1 figure 2 -/	Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
figure 2 US 5 548 128 A (SOREF RICHARD A [US] ET AL) 20 August 1996 (1996-08-20) column 1, lines 49-63 column 2, lines 28-58 claim 1 figure 2	(TORVIK JOHN TARJE [US]) 21 April 2005 (2005-04-21) paragraphs [0005], [0025], [0026], [0029], [0047]	1-32
AL) 20 August 1996 (1996-08-20) column 1, lines 49-63 column 2, lines 28-58 claim 1 figure 2			
-/	,	AL) 20 August 1996 (1996-08-20) column 1, lines 49-63 column 2, lines 28-58 claim 1	1-32
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Date of the actual completion of the international search 21 July 2008	Date of mailing of the international search report $07/08/2008$
Name and mailing address of the ISA/ European Patent Office, P.B. 5818 Patentlaan 2 NL - 2280 HV Rijswijk Tel. (+31-70) 340-2040, Tx. 31 651 epo nl, Fax: (+31-70) 340-3016	Authorized officer Adams, Richard

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INTERNATIONAL SEARCH REPORT

International application No PCT/US2006/041891

Category*	Citation of document, with indication, where appropriate, of the relevant passages		Relevant to claim No.
A	US 5 883 912 A (RAMDANI JAMAL [US] ET AL) 16 March 1999 (1999-03-16) column 2, lines 11-17 column 3, lines 17-34 claims 1,2		1-32
	figures 1,2 		
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INTERNATIONAL SEARCH REPORT

Information on patent family members

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Patent document cited in search report		Publication date	Patent family member(s)	Publication date
US 2005082554	A1	21-04-2005	NONE	
US 5548128	Α	20-08-1996	NONE	· ,
US 5883912	Α	16-03-1999	NONE	

Form PCT/ISA/210 (patent family annex) (April 2005)