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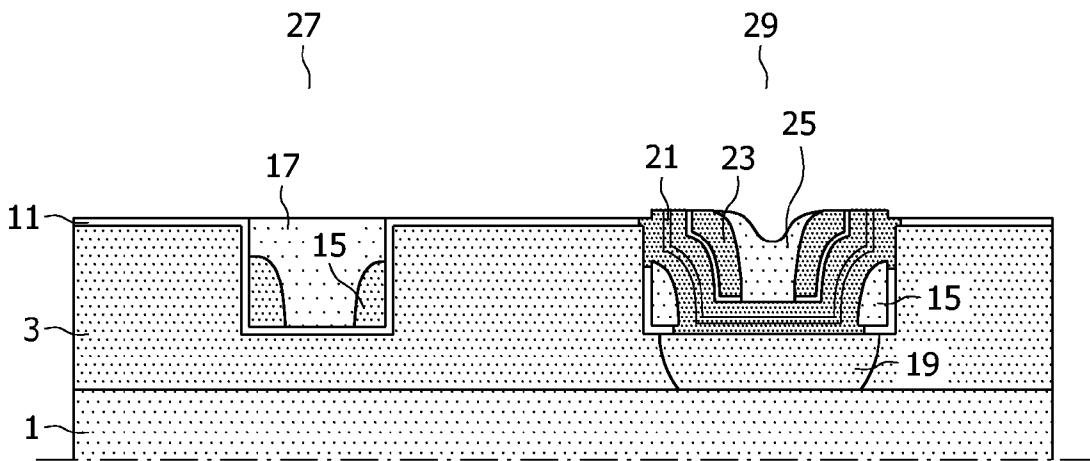
- as to applicant's entitlement to apply for and be granted a patent (Rule 4.17(ii))

**Published:**

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[Continued on next page]

**(54) Title: METHOD OF FABRICATING A BIPOLAR TRANSISTOR**



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**(57) Abstract:** The invention provides a method for fabricating a bipolar transistor applying a standard shallow trench isolation fabrication method to simultaneously form a vertical bipolar transistor (29) or a lateral bipolar transistor (49) in a first trench (5, 50) and a shallow trench isolation region (27, 270) in a second trench (7, 70). Further, the fabrication method may simultaneously form a vertical bipolar transistor (27) in the first trench (5, 50), a lateral bipolar transistor (49) in a third trench and a shallow trench isolation region (27, 270) in the second trench (7, 70).



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A. CLASSIFICATION OF SUBJECT MATTER	INV. H01L21/331	H01L29/735	H01L29/732	H01L21/762
ADD.	H01L27/06			

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)  
H01L

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

**C. DOCUMENTS CONSIDERED TO BE RELEVANT**

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Y	US 6 169 007 B1 (PINTER JERALD FRANK [US]) 2 January 2001 (2001-01-02) abstract; figures 1,11-13 -----	1-6
A	EP 0 851 488 A1 (SGS THOMSON MICROELECTRONICS [FR] ST MICROELECTRONICS SA [FR]) 1 July 1998 (1998-07-01) abstract; figures 11,12,17-21 -----	1-6
A	EP 1 094 514 A2 (NIPPON ELECTRIC CO [JP] NEC ELECTRONICS CORP [JP]) 25 April 2001 (2001-04-25) abstract; figures 4a,4b,6a,6b -----	1-6
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Date of the actual completion of the international search	Date of mailing of the international search report
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30 January 2007

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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
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Dauw, Xavier

**INTERNATIONAL SEARCH REPORT**International application No  
PCT/IB2006/051261**C(Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT**

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	US 2004/222496 A1 (FREEMAN GREGORY G [US] ET AL) 11 November 2004 (2004-11-11) abstract; figures 3,4a-4f,8a-8h -----	1-6
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**INTERNATIONAL SEARCH REPORT**

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