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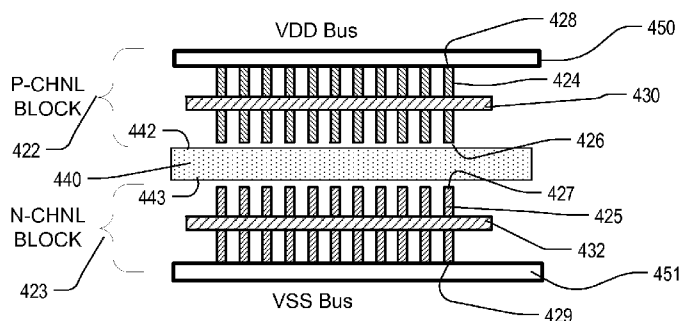
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(54) **Title:** N-CHANNEL AND P-CHANNEL END-TO-END FINFET CELL ARCHITECTURE**FIG. 5**

(57) **Abstract:** A finFET block architecture uses end-to-end finFET blocks. A first set of semiconductor fins having a first conductivity type and a second set of semiconductor fins having a second conductivity type can be aligned end-to-end. An inter-block isolation structure separates the semiconductor fins in the first and second sets. The ends of the fins in the first set are proximal to a first side of the inter-block isolation structure and ends of the fins in the second set are proximal to a second side of the inter-block isolation structure. A patterned gate conductor layer includes a first gate conductor extending across at least one fin in the first set of semiconductor fins, and a second gate conductor extending across at least one fin in the second set of semiconductor fins. The first and second gate conductors are connected by an inter-block conductor.



A. CLASSIFICATION OF SUBJECT MATTER**H01L 29/78(2006.01)i, H01L 21/336(2006.01)i**

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 29/78; H01L 29/00; H01L 21/336; H01L 29/786; H01L 27/108; H01L 21/8242; H01L 31/119; H01L 21/8238; H01L 27/08

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Korean utility models and applications for utility models

Japanese utility models and applications for utility models

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

eKOMPASS(KIPO internal) & Keywords: standard-cell, CMOS, fin, functional block, end-to-end alignment and isolation

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	KR 10-2000-0067736 A (MATSUSHITA ELECTRONICS CORP) 25 November 2000 See abstract, page 4, lines 10-25, claim 1 and figure 1.	1-53
A	JP 2008-198647 A (SEMICONDUCTOR ENERGY LAB CO., LTD.) 28 August 2008 See abstract, paragraphs [0016]-[0017], claim 1 and figure 1.	1-53
A	US 2005-0116268 A1 (KOICHI TAHIRA et al.) 02 June 2005 See abstract, paragraphs [0069]-[0076], claim 1 and figure 5A.	1-53
A	KR 10-2012-0017966 A (SAMSUNG ELECTRONICS CO., LTD.) 29 February 2012 See abstract, paragraphs [0110]-[0114], claims 1, 4-9 and figure 40.	1-53
A	US 2007-0080380 A1 (PETER CHANG) 12 April 2007 See abstract, paragraphs [0036]-[0037], claim 15 and figure 2.	1-53
A	US 2012-0056264 A1 (BRENT A. ANDERSON et al.) 08 March 2012 See abstract, paragraph [0032], claim 1, and figure 7.	1-53



Further documents are listed in the continuation of Box C.



See patent family annex.

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"&" document member of the same patent family

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INTERNATIONAL SEARCH REPORT

Information on patent family members

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