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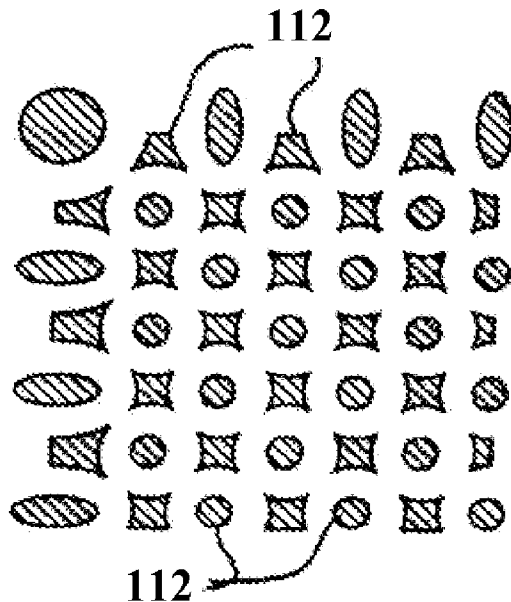
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[Continued on next page]

(54) Title: RESIST FEATURE AND REMOVABLE SPACER PITCH DOUBLING PATTERNING METHOD FOR PILLAR STRUCTURES



**FIG. 10B**

(57) Abstract: A method of making a semiconductor device includes forming at least one layer over a substrate, forming at least two spaced apart features of imagable material over the at least one layer, forming sidewall spacers on the at least two features and filling a space between a first sidewall spacer on a first feature and a second sidewall spacer on a second feature with a filler feature. The method also includes selectively removing the sidewall spacers to leave the first feature, the filler feature and the second feature spaced apart from each other, and etching the at least one layer using the first feature, the filler feature and the second feature as a mask.

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TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

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**INTERNATIONAL SEARCH REPORT**

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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)  
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**

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
E	US 2010/105210 A1 (CHEN YUNG-TIN [US] ET AL) 29 April 2010 (2010-04-29)	1-3
L	paragraphs [0024], [ 33]; figures 2A-2C, 2J,2K	1-3
X,P	US 2009/227108 A1 (SHIU WEI-CHENG [TW] ET AL) 10 September 2009 (2009-09-10) paragraph [0042] - paragraph [0049]	1-7, 10-19
X	US 2008/206681 A1 (NOLSCHER CHRISTOPH [DE] ET AL) 28 August 2008 (2008-08-28) figures 1-14	1-7, 10-19
A	US 2008/318169 A1 (TANIGUCHI SHUICHI [JP]) 25 December 2008 (2008-12-25) figures 7-10	4

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# INTERNATIONAL SEARCH REPORT

Information on patent family members

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