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[Continued on next page]

(54) Title: INTEGRATED CIRCUIT WITH MATCHING THRESHOLD VOLTAGES AND METHOD FOR MAKING SAME

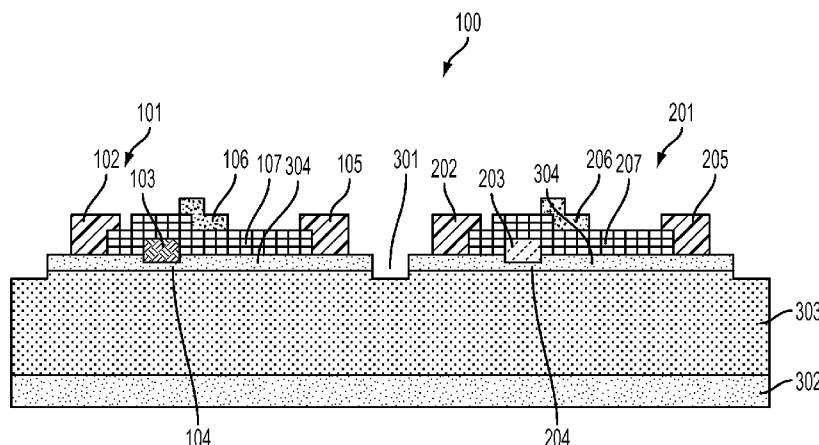


FIG. 1

(57) Abstract: An integrated circuit having a substrate, a buffer layer formed over the substrate, a barrier layer formed over the buffer layer, and an isolation region that isolates an enhancement mode device from a depletion mode device. The integrated circuit further includes a first gate contact for the enhancement mode device that is disposed in one gate contact recess and a second gate contact for the depletion mode device that is disposed in a second gate contact recess.

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A. CLASSIFICATION OF SUBJECT MATTER

IPC(8) - H01L29/778 (2014.01)

CPC - H01L27/0883 (2014.09)

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)

IPC(8) - H01L29/778 (2014.01)

USPC - 257/392, 257/E27.061, 257/194, 257/E29.246

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

CPC - H01L27/0605, H01L27/0629, H01L27/0883, H01L29/2003, H01L29/778, H01L29/7786, H02M7/106 (2014.09) (keyword delimited)

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

Orbit, Google Patents, Google Scholar.

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	US 2012/0235209 A1 (BRIERE et al.) 20 September 2012 (20.09.2012) Entire document	1-17
Y	US 2012/261720 A1 (PUGLISI et al.) 18 October 2012 (18.10.2012) Entire document	1-11
Y	US 2011/0221011 A1 (BAHAT-TREIDEL et al.) 15 September 2011 (15.09.2011) Entire document	6-10
Y	US 2012/0091513 A1 (SAIMEI et al.) 19 April 2012 (19.04.2012) Entire document	10-17
Y	US 2009/0230482 A1 (KATO et al.) 17 September 2009 (17.09.2009) Entire document	12-17
A	US 2006/0027840 A1 (WOHLMUTH) 09 February 2006 (09.02.2006) Entire document	1-17

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"&" document member of the same patent family

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21 October 2014

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