

| DOCUMENTS CONSIDERED TO BE RELEVANT | | | |
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| Category | Citation of document with indication, where appropriate, of relevant passages | Relevant to claim | CLASSIFICATION OF THE APPLICATION (IPC) |
| Y | US 2012/081976 A1 (WIDJAJA YUNIARTO [US] ET AL) 5 April 2012 (2012-04-05) * paragraphs [0012], [0115], [0132], [0177]; figures 48-51 * | 1-8 | INV. G11C11/39 G11C11/402 G11C11/4067 G11C11/408 G11C11/4094 |
| Y | US 2011/080796 A1 (BRUENNERT MICHAEL [DE] ET AL) 7 April 2011 (2011-04-07) * paragraphs [0013], [0027]; figure 2 * | 1-8 | G06F11/10 H01L27/102 H01L29/66 |
| A | US 2012/056151 A1 (MOULI CHANDRA [US]) 8 March 2012 (2012-03-08) * paragraphs [0002] - [0006], [0111] - [0116]; figures 10-11 * | 1-8 | ADD. G11C11/406 |
| A | US 2005/146972 A1 (HONG YUN S [KR]) 7 July 2005 (2005-07-07) * paragraph [0027] - paragraph [0028]; figure 1 * | 1-8 | |
| A | US 2014/269046 A1 (LAURIN LUCA [IT] ET AL) 18 September 2014 (2014-09-18) * paragraphs [0079], [0083]; claim 12; figures 13-14 * | 1-8 | |
| | | | TECHNICAL FIELDS SEARCHED (IPC) |
| | | | G11C H01L |
| The supplementary search report has been based on the last set of claims valid and available at the start of the search. | | | |
| Place of search The Hague | | Date of completion of the search 11 January 2018 | Examiner Kontogiannis, K |
| <p>CATEGORY OF CITED DOCUMENTS</p> <p>X : particularly relevant if taken alone Y : particularly relevant if combined with another document of the same category A : technological background O : non-written disclosure P : intermediate document</p> <p>T : theory or principle underlying the invention E : earlier patent document, but published on, or after the filing date D : document cited in the application L : document cited for other reasons & : member of the same patent family, corresponding document</p> | | | |

CLAIMS INCURRING FEES

The present European patent application comprised at the time of filing claims for which payment was due.

- Only part of the claims have been paid within the prescribed time limit. The present European search report has been drawn up for those claims for which no payment was due and for those claims for which claims fees have been paid, namely claim(s):
- No claims fees have been paid within the prescribed time limit. The present European search report has been drawn up for those claims for which no payment was due.

LACK OF UNITY OF INVENTION

The Search Division considers that the present European patent application does not comply with the requirements of unity of invention and relates to several inventions or groups of inventions, namely:

see sheet B

- All further search fees have been paid within the fixed time limit. The present (supplementary) European search report has been drawn up for all claims.
- As all searchable claims could be searched without effort justifying an additional fee, the Search Division did not invite payment of any additional fee.
- Only part of the further search fees have been paid within the fixed time limit. The present (supplementary) European search report has been drawn up for those parts of the European patent application which relate to the inventions in respect of which search fees have been paid, namely claims:
- None of the further search fees have been paid within the fixed time limit. The present (supplementary) European search report has been drawn up for those parts of the European patent application which relate to the first mentioned in the claims, namely claims:

1-8



**LACK OF UNITY OF INVENTION
SHEET B**

Application Number
EP 15 84 4668

The Search Division considers that the present European patent application does not comply with the requirements of unity of invention and relates to several inventions or groups of inventions, namely:

1. claims: 1-8

Word line fragmentation to to reduce current consumption during access operations.

2. claims: 9-15

Parity encoding to to reduce current consumption during standby mode.

**ANNEX TO THE EUROPEAN SEARCH REPORT
ON EUROPEAN PATENT APPLICATION NO.**

EP 15 84 4668

This annex lists the patent family members relating to the patent documents cited in the above-mentioned European search report. The members are as contained in the European Patent Office EDP file on
The European Patent Office is in no way liable for these particulars which are merely given for the purpose of information.

11-01-2018

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