



SUPPLEMENTARY PARTIAL EUROPEAN SEARCH REPORT
under Rule 164(1) and 62a and/or 63 of the European Patent Convention.

Application Number

EP 14 73 7723

This report shall be considered, for the purposes of
subsequent proceedings, as the European search report

DOCUMENTS CONSIDERED TO BE RELEVANT			
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (IPC)
X	US 2010/001403 A1 (YODA KENICHI [JP]) 7 January 2010 (2010-01-07)	1,3-5	INV. H01L23/52
A	* paragraphs [0003], [0054], [0055]; figures 7,8 * -----	2	G06F21/75 H01L27/02 H01L23/00
			TECHNICAL FIELDS SEARCHED (IPC)
			H01L
The supplementary search report has been based on the last set of claims valid and available at the start of the search.			
INCOMPLETE SEARCH			
The Search Division considers that the present application, or one or more of its claims, does/do not comply with the EPC so that only a partial search (R.62a, 63) has been carried out.			
Claims searched completely :			
Claims searched incompletely :			
Claims not searched :			
Reason for the limitation of the search: see sheet C			
Place of search Munich		Date of completion of the search 2 January 2017	Examiner Mosig, Karsten
CATEGORY OF CITED DOCUMENTS			
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 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			

**INCOMPLETE SEARCH
SHEET C**

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Claim(s) completely searchable:
1-5, 8-19

Claim(s) not searched:
6, 7

Reason for the limitation of the search:

In reply to the invitation to indicate the claims on which the search is to be based, the applicant argued that claims 1 and 6 would fall under the exception under Rule 43(2)(c) as alternative solutions to the same problem. However, this argumentation cannot be followed for the following reasons:

The common problem addressed by claims 1 and 6 is to provide protection against reverse engineering. This problem definition is considered too broad in the present case because, if one were to follow this line of argumentation, hundreds of different published applications would have to be considered as alternative solutions rather than as different inventions. The objective problem addressed by claim 1 is to deactivate the device in case a portion of the second metal layer is removed, for which purpose the device of claim 1 comprises the technical feature of forming one or more gate connections in the second metal layer. The device of claim 6 in contrast addresses the problem of inducing a gate failure in the device in case an ion beam is used for reverse engineering, for this purpose it comprises one or more floating structures in the second metal layer connected to transistor gates. Claims 1 and 6 cannot therefore be considered as alternative solutions to the same problem in the sense of Rule 43(2)(c) EPC.

Thus, the search report has been drawn up on the basis of the first independent device claim of invention I and its dependent claims, this is claims 1 - 5 (Rule 62a(1) EPC).

The applicant's attention is drawn to the fact that the application will be further prosecuted on the basis of subject-matter for which a search has been carried out and that the claims should be limited to that subject-matter at a later stage of the proceedings (Rule 62a(2) EPC).

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:

1-7

**LACK OF UNITY OF INVENTION
SHEET B**

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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: 1-7

Device having a base layer, a first and a second layer, and at least two metal layers wherein manipulation of the second layer deactivates the device (leads to a gate failure)

2. claims: 8-19

Electronic element having two devices with two characteristics dependent on a parasitic element, the output of the element being dependent on the first and second characteristic.

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02-01-2017

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
US 2010001403 A1	07-01-2010	JP 2010016164 A	21-01-2010
		US 2010001403 A1	07-01-2010
		US 2011165737 A1	07-07-2011
