Title: DUAL STRESS DEVICE AND METHOD

Abstract: A semiconductor device (80, 85) including semiconductor material (35, 40) having a bend and a trench feature formed at the bend, and a gate structure (45, 50) at least partially disposed in the trench feature. A method of fabricating a semiconductor structure including forming a semiconductor material with a trench feature over a layer, forming a gate structure at least partially in the trench feature, and bending the semiconductor material such that stress is induced in the semiconductor material in an inversion channel region of the gate structure.
**INTERNATIONAL SEARCH REPORT**

**A. CLASSIFICATION OF SUBJECT MATTER**
- IPC(8) - H01L 21/8238(2008.01)
- USPC - 438/221

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) - H01L 21/8238 (2008.01)
- USPC - 438/221

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 practicable, search terms used)
- Patbase, Google Patents

**C. DOCUMENTS CONSIDERED TO BE RELEVANT**

<table>
<thead>
<tr>
<th>Category</th>
<th>Citation of document, with indication, where appropriate, of the relevant passages</th>
<th>Relevant to Claim No.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Y</td>
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<td>6-8, 10-12, 17, 19-20</td>
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<td>6-8, 10-12, 17, 19-20</td>
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☐ Further documents are listed in the continuation of Box C.

- Special categories of cited documents:
  - "A": document defining the general state of the art which is not considered to be of particular relevance
  - "E": earlier application or patent but published on or after the international filing date
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  - "O": document referring to an oral disclosure, use, exhibition or other means
  - "P": document published prior to the international filing date but later than the priority date claimed
  - "T": later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle of or theory underlying the invention
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**Date of the actual completion of the international search**
14 March 2008

**Date of mailing of the international search report**
02 MAY 2008

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