(54) Title: METHODS AND COMPOSITIONS FOR TREATING INTERVERTEBRAL DISC DISORDERS

(57) Abstract: Described herein are methods and compositions for inhibiting, treating and reversing intervertebral disc disorders using transcription factor inhibitors. In certain embodiments, the transcription factor inhibitor targets the transcription factor NF-κB. Also described are methods and compositions where intervertebral disc disorder is reversed using a decoy oligodeoxynucleotide that blocks NF-κB.
**INTERNATIONAL SEARCH REPORT**

**A. CLASSIFICATION OF SUBJECT MATTER**

IPC(8):  
C12N 15/00 (2006.01); C07H 21/04 (2006.01); A61K 48/00 (2006.01)  
C12N 15/63(2006.01)  

USPC: 435/320.1, 453; 536/24.5, 514/44  
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)  
U.S.: 435/320.1, 453; 536/24.5, 514/44

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)  
Please See Continuation Sheet

**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>
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<tbody>
<tr>
<td>X</td>
<td>US 2003/0113796 (Sims et al) 19 June 2003. See abstract, and paragraphs 0029-0130, 0156-0158, and 0174</td>
<td>1-3, 6, 8-12-20-22</td>
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<td>A</td>
<td>US 2006/0241066 (Tomita et al) 26 October 2006. See abstract.</td>
<td>1-24</td>
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Further documents are listed in the continuation of Box C.  

See patent family annex.

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<th>Special categories of cited documents:</th>
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<th>“X”</th>
<th>“Y”</th>
<th>“A”</th>
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<tr>
<td>“A” - document defining the general state of the art which is not considered to be of particular relevance</td>
<td>later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention</td>
<td>document of particular relevance, the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone</td>
<td>document of particular relevance, the claimed invention cannot be considered to involve an inventive step when the document is taken alone</td>
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<td>document of particular relevance, the claimed invention cannot be considered to involve an inventive step when the document is taken alone</td>
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<td>document of particular relevance, the claimed invention cannot be considered to involve an inventive step when the document is taken alone</td>
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**Date of the actual completion of the international search**  
06 August 2007 (06.08.2007)

**Date of mailing of the international search report**  
29 Aug 2007

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Facsimile No. (571) 273-3201

Form PCT/ISA/210 (second sheet) (April 2005)
Continuation of B. FIELDS SEARCHED Item 3:
EAST: USPGPUB, USPAT, USOCR, JPO, EPO, IBM_TDB, DERWENT; STN: Medline, Embase, Biosis, Caplus; STIC Sequence search