Title: AN IMPROVED HIGH SURFACE AREA FIBER AND TEXTILES MADE FROM THE SAME

Abstract: The present invention is directed to a high surface area fiber and textiles made from the same. In one preferred embodiment the fiber has a middle region with a plurality of projections that define a plurality of channels, which increases the surface area of the fiber. In one preferred embodiment, the fiber has a specific surface area of about 140,000 cm²/g or higher and a denser of about 1.0 to about 2.0. The fiber of the present invention is made using a bicomponent extrusion process using a thermoplastic polymer and a dissolvable sheath.
INTERNATIONAL SEARCH REPORT

A. CLASSIFICATION OF SUBJECT MATTER
IPC(8) - D01D 5/00 (2008.01); D02G 1/00 (2008.01)
USPC - 428/470
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)
428/470

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched
USPC - 428/470; 55/027, 528 and all relevant classifications (text search, see terms below)

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)
PubWEST (USPTO.GP8B.EPAP.JPAB); DialogPRO (Engineering); Google Scholar
Search Terms: bicomponent, internal fiber, cross section, shape, polyvinyl alcohol, thermoplastic, media

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>
<td>US 2006/0096263 A1 (Kalbaugh et al.) 11 May 2006 (11.05.2006), entire document especially para [0036], [0074]-[0075], [0020], [0036]-[0037], [0081], [0039], [0040], [0056], [0022], [0055], Table 1</td>
<td>1-28</td>
</tr>
<tr>
<td>Y</td>
<td>US 5,125,818 A (Yeh) 30 June 1992 (30.06.1992), entire document especially Abstract, col 3, in 19-31; col 8, in 32-60 and Fig. 1A-2B</td>
<td>1-28</td>
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</table>

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 or theory underlying the invention
  "X" 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
  "Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art
  "&" document member of the same patent family

Date of the actual completion of the international search
29 January 2008 (29.01.2008)

Date of mailing of the international search report
14 MAR 2008

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