Abstract: Various devices and methods may be provided to aspirate bone marrow from an associated bone using a powered drive and an aspiration needle or aspiration needle set. Such aspiration devices and methods may also be used in association with stem cell transplant procedures. The aspiration devices may include a coupler assembly, a containment bag or sterile sleeve, an ejector and/or an ejector funnel. An aspiration needle set may include a cannula and trocar with respective tips having optimum configurations, dimensions and/or orientations relative to each other to optimize penetration of a bone and/or bone marrow with minimum trauma to a patient. Exterior portions of some cannulas may include markings to indicate depth of penetration into associated bone marrow. Some cannulas may include one or more side ports for use during aspiration of bone marrow.
INTERNATIONAL SEARCH REPORT

A. CLASSIFICATION OF SUBJECT MATTER

IPC(8) - A61M 31/00 (2008.01)
USPC - 606/80

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) - A61B 10/00, 17/16, 17/56, 17/58; A61M 31/00, 37/00 (2008.01)
USPC - 128/754; 600/564, 566, 567; 604/264; 606/80

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic database consulted during the international search (name of database and, where practicable, search terms used)

PatBase, Google

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 5,368,046 A (SCARFONE et al) 29 November 1994 (29.11.1994) entire document</td>
<td>7</td>
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<tr>
<td>Y</td>
<td>US 4,543,966 A (ISLAM et al) 01 October 1985 (01.10.1985) entire document</td>
<td>13, 22, 23</td>
</tr>
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Further documents are listed in the continuation of Box C.

Date of the actual completion of the international search
13 February 2008

Date of mailing of the international search report
07 APR 2008

Name and mailing address of the ISA/US
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Form PCT/ISA/210 (second sheet) (April 2007)