Abstract

Disclosure herein are methods and devices of producing hemostasis, tissue closure, and/or vessel closure following a percutaneous medical procedure that causes the creation of a passageway in a patient. A probe that has a thermal energy source may be inserted into the passageway. The application of thermal energy from the thermal energy source can heat surrounding tissue and cause tissue and/or blood coagulation. In some embodiments, the thermal energy source is an ultrasound transducer.
before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments

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For two-letter codes and other abbreviations, refer to the “Guidance Notes on Codes and Abbreviations” appearing at the beginning of each regular issue of the PCT Gazette.
INTERNATIONAL SEARCH REPORT

A. CLASSIFICATION OF SUBJECT MATTER
   IPC: A61H 1/00(2006.01)

   USPC: 601/002
   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.: 601/002; 600/437,438

   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)

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>X</td>
<td>US 5,882,302 A (DRISCOLL, Jr. et al.) 16 March 1999 (16.03.1999), abstract, column 5, lines 4-9 column 7, lines 56-67 column 11, lines 15-17.</td>
<td>1,2,3,6,7,10,11,14,15,1, 8,19,21</td>
</tr>
<tr>
<td>Y</td>
<td>US 5,713,363 A (SEWARD et al.) 03 February 1998 (03.02.1998), column 4, lines 61-65.</td>
<td>4,5,7,8,9,12,13,15,16,1, 7, 20</td>
</tr>
<tr>
<td>Y</td>
<td>US 5,558,092 A (UNGER et al.) 24 September 1996 (24.09.1996), column 8, lines 37-41.</td>
<td>4,5,7,8,9,12,13,15,16,1, 7</td>
</tr>
<tr>
<td>Y</td>
<td>US 6,078,831 A (BELEF et al.) 20 June 2000 (20.07.2000), column 6, lines 42-45.</td>
<td>4,5,7,8,9,12,13,15,16,1, 7</td>
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</table>

☐ Further documents are listed in the continuation of Box C. ☐ See patent family annex.

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Date of the actual completion of the international search
10 May 2007 (10.05.2007)

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