Fig. 12A

An apparatus provides feedback regarding the material in which tip of the apparatus is located as the tip is advanced into matter of varying resistances. The apparatus responds to a change in pressure, force, or other parameter such that when the tip reaches matter of a certain resistance, a change in the parameter is sensed. The apparatus provides a driving force to a penetrating medical device, such as a needle, when the apparatus tip encounters material of high resistance. When the apparatus tip encounters a low resistance material, no further driving force is applied to the apparatus. An inner core may be advanced into the low resistance material for deployment of a gas or a liquid as desired.
before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments

(88) Date of publication of the international search report:
2 October 2008
A. CLASSIFICATION OF SUBJECT MATTER

A61M 25/00(2006.01)i, A61M 5/00(2006.01)i

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 A61M 25/00

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)
eKIPASS, WPI, USPTO, PAJ "catheter, epidural, Tuohy needle, peritoneal, laparoscopy, etc"

C. DOCUMENTS CONSIDERED TO BE RELEVANT

<table>
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<th>Category</th>
<th>Citation of document, with indication, where appropriate, of the relevant passages</th>
<th>Relevant to claim No</th>
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</table>

Date of the actual completion of the international search

28 JULY 2008 (28 07 2008)

Date of mailing of the international search report

28 JULY 2008 (28.07.2008)

Name and mailing address of the ISA/KR

Korean Intellectual Property Office
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Heo, Joo-Hyun
Telephone No 82-42-481-8150

Form PCT/ISA/210 (second sheet) (My 2008)
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INTERNATIONAL SEARCH REPORT

Box No. II  Observations where certain claims were found unsearchable (Continuation of item 2 of first sheet)

This international search report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons

1  ☒ Claims Nos 6-19 and 39-55
   because they relate to subject matter not required to be searched by this Authority, namely
   Claims 6-19 and 39-55 pertain to methods for treatment of the human or animal body by surgery, and thus relate to a subject matter which this International Searching Authority is not required, under Article 17(2)(a)(i) of the PCT and Rule 39 (iv) of the Regulations under the PCT, to search

2  ☒ Claims Nos 34-38
   because they relate to parts of the international application that do not comply with the prescribed requirements to such an extent that no meaningful international search can be carried out, specifically
   Claims 34-38 are unclear, because it is described that they further define "the apparatus of claim 31", but claim 31 is concerned with "a medical device"

3  ☐ Claims Nos
   because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6-4(a)

Box No. III  Observations where unity of invention is lacking (Continuation of item 3 of first sheet)

This International Searching Authority found multiple inventions in this international application, as follows

1  ☐ As all required additional search fees were timely paid by the applicant, this international search report covers all searchable claims

2  ☐ As all searchable claims could be searched without effort justifying an additional fee, this Authority did not invite payment of any additional fee

3  ☐ As only some of the required additional search fees were timely paid by the applicant, this international search report covers only those claims for which fees were paid, specifically claims Nos

4  ☐ No required additional search fees were timely paid by the applicant Consequently, this international search report is restricted to the invention first mentioned in the claims, it is covered by claims Nos

Remark on Protest  ☐ The additional search fees were accompanied by the applicant's protest and, where applicable, the payment of a protest fee
☐ The additional search fees were accompanied by the applicant's protest but the applicable protest fee was not paid within the time limit specified in the invitation
☐ No protest accompanied the payment of additional search fees