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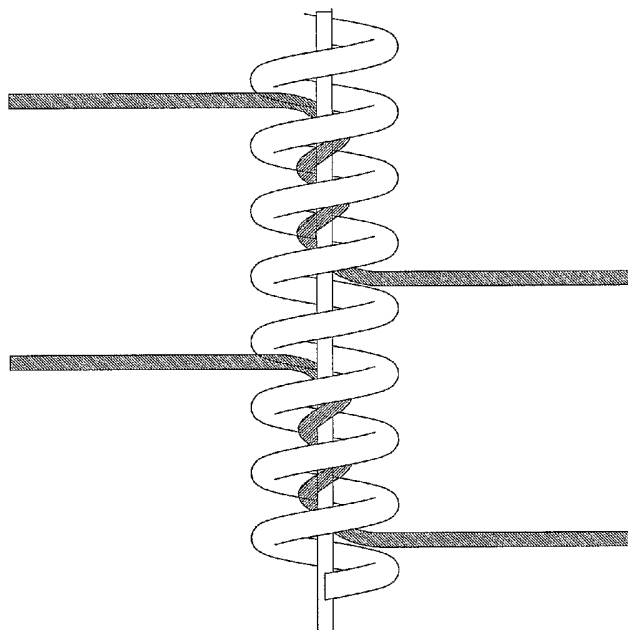
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[Continued on next page]

(54) Title: METALLIC COILS ENLACED WITH BIOLOGICAL OR BIODEGRADABLE OR SYNTHETIC POLYMERS OR  
FIBERS FOR EMBOLIZATION OF A BODY CAVITY



(57) Abstract: Vaso-occlusive coils comprising fibers. The vaso-occlusive coil (12) can be a helical coil or a double helix made of biocompatible metal wire whereas the fibers (14, 16, 18, 28) are enlaced between at least a winding of the coil (12) and are made of polymeric materials like copolymers of glycolic/lactic acid. The fibers (14, 16, 18, 28) or the coil (12) can be coated with a bioactive material. The device (10) can comprise a stretch-resistant member and can be radio-opaque.



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A. CLASSIFICATION OF SUBJECT MATTER  
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## B. FIELDS SEARCHED

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## C. DOCUMENTS CONSIDERED TO BE RELEVANT

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☒ Further documents are listed in the continuation of box C.

☒ Patent family members are listed in annex.

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## INTERNATIONAL SEARCH REPORT

International Application No

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## C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

| Category * | Citation of document, with indication, where appropriate, of the relevant passages                                                       | Relevant to claim No.                                                                                                     |
|------------|------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------|
| X          | US 6 280 457 B1 (WALLACE MICHAEL P ET AL)<br>28 August 2001 (2001-08-28)                                                                 | 1-11,<br>13-26,<br>28-32,<br>35,<br>38-43,<br>50,55,<br>56,<br>69-79,<br>81-94,<br>96-100,<br>105-110,<br>117,<br>121-124 |
| Y          | column 5, line 46 - column 7, line 13<br>column 7, line 31 - column 10, line 36<br>column 12, line 4 - line 14<br>figures 1A,1C-1H,2A-2G | 12,<br>44-49,<br>80,<br>111-116                                                                                           |
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# INTERNATIONAL SEARCH REPORT

International Application No

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## C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

| Category * | Citation of document, with indication, where appropriate, of the relevant passages                           | Relevant to claim No.                |
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# INTERNATIONAL SEARCH REPORT

International application No.  
PCT/US2005/018087

## Box 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.: 57-62, 125-130, 206-211  
because they relate to subject matter not required to be searched by this Authority, namely:  
Rule 39.1(iv) PCT - Method for treatment of the human or animal body by surgery
2. ☐ Claims Nos.:  
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:
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 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:

see additional sheet

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.:  
44-49, 111-116, 131-205, 212-215, 217
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.

☒ No protest accompanied the payment of additional search fees.

FURTHER INFORMATION CONTINUED FROM PCT/ISA/ 210

This International Searching Authority found multiple (groups of) inventions in this international application, as follows:

1. claims: 1-26,28-32,35,38-43,50,55,56,69-94,96-100,105-110,117,  
121-124,63-68,216

a vaso-occlusive device comprising a coil and a plurality of enlaced fibers, where the coil is made of nitinol. The method of producing such a vaso-occlusive device.

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2. claims: 27,95

a vaso-occlusive device comprising a coil and a plurality of enlaced fibers, the majority of fibers enlase a single winding.

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3. claims: 44-49,111-116,131-135,217

a vaso-occlusive device comprising a coil and a plurality of enlaced fibers where the plurality of enlaced fibers are comprised of copolymer of glycolic acid and lactic acid in a ratio of 99:1 and the method of producing it.

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4. claims: 33,34,36,37,51-54,101-104,118-120

a vaso-occlusive device comprising a coil, a plurality of enlaced fibers and a lubricious hydrophilic coating.

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5. claims: 136-205,212-215

a vaso-occlusive device comprisin a coil, a plurality of enlaced fibers and a stretch resistant member and the method of producing it.

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# INTERNATIONAL SEARCH REPORT

Information on patent family members

International Application No

PCT/US2005/018087

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