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(71) Applicant (for all designated States except US): **SURGICA CORPORATION** [US/US]; 5090 Robert Mathews Parkway, #4, El Dorado Hills, CA 95762 (US).

(72) Inventors; and

(75) Inventors/Applicants (for US only): **MATSON, Louis, R.** [US/US]; 4581 Park Woods Drive, Pollock Pines, CA 95726 (US). **MCNAMARA, Gerald, R.** [US/US]; 1500 Kestrel Ct., Reno, NV 89509 (US). **BRANDOM, Donald, K.** [US/US]; 5132 Cowell Blvd., Davis, CA 95616 (US).

(74) Agents: **TRECARTIN, Richard, F.** et al.; Morgan Lewis & Bockius LLP, One Market Street, Spear Street Tower, San Francisco, CA 94105 (US).

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(54) Title: COMPRESSIBLE INTRAVASCULAR EMBOLIZATION PARTICLES AND RELATED METHODS AND DELIVERY SYSTEMS

(57) Abstract: The present invention relates to substantially compressible, spherical porous embolization particles, including methods of making and using the particles. Further, the invention relates to embolization delivery systems for the introduction of the particle into the vascular luer.



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INTERNATIONAL SEARCH REPORT

International application No

PCT/US2007/061322

A. CLASSIFICATION OF SUBJECT MATTER
INV. A61L24/00 A61L24/06

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)

A61L A61K C08J

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 practical, search terms used)

EPO-Internal , WPI Data

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	WO 03/084582 A (SCIMED LIFE SYSTEMS INC [US]; BUISER MARCIA [US]; BELLISARIO MARC [US]) 16 October 2003 (2003-10-16) page 2, lines 5-10 page 4, lines 6-14 page 6, line 7 - page 7, line 5 example 2 claims 1,11,21-23,47,49,50 -----	1,4-15, 24,26
A	US 2003/203985 A1 (BALDWIN SAMUEL P [US] ET AL) 30 October 2003 (2003-10-30) page 1, paragraphs 3,7 page 2, paragraph 22 claims 1,2,8,10 ----- -/-	10,24



Further documents are listed in the continuation of Box C.



See patent family annex

* 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 document but published on or after the international filing date

"L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)

"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

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Name and mailing address of the ISA/

European Patent Office, P.B. 5818 Patentlaan 2
 NL - 2280 HV Rijswijk
 Tel. (+31-70) 340-2040, Tx. 31 651 epo nl,
 Fax: (+31-70) 340-3016

Authorized officer

Van den Buleke, H

INTERNATIONAL SEARCH REPORT

International application No

PCT/US2007/061322

C(Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT

Category'	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	WO 98/04198 A (MICRO THERAPEUTICS INC [US]; JONES MICHAEL L [US]; GREFF RICHARD J [US] 5 February 1998 (1998-02-05) page 4, lines 25-31 page 12, lines 11-22 page 14, line 3 - page 15, line 1 claims 1-3,6-17,20-22 -----	1-6,11, 12,14-17
X	US 5 554 659 A (ROSENBLATT SOLOMON [US]) 10 September 1996 (1996-09-10) column 5, line 22 - column 6, line 18 column 7, lines 35-42 column 9, lines 2-6 example 1 claims 1,6,10-13,15 -----	24,25

INTERNATIONAL SEARCH REPORT

International application No
PCT/US2007/061322

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 -
because they relate to subject matter not required to be searched by this Authority namely
see FURTHER INFORMATION sheet PCT/ISA/210
- 2 **D** 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 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

see additional sheet

- 1 ☐ As all required additional search fees were timely paid by the applicant this international search report covers allsearchable claims
- 2 ☐ As all searchable claims could be searched without effort justifying an additional fees, this Authority did not invite payment of additional fees
- 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

1-17 , 24-26

Remark on Protest

- ☐ The additional search fees were accompanied by the applicants 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

FURTHER INFORMATION CONTINUED FROM PCT/ASA/ 210

Continuation of Box II.1

Although claims 14-17 are directed to a method of treatment of the human/animal body, the search has been carried out and based on the alleged effects of the compound/composition.

Continuation of Box II.1

Claims Nos. : -

Rule 39.1(iv) PCT - Method for treatment of the human or animal body by therapy

FURTHER INFORMATION CONTINUED FROM PCT/ASA/ 210

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

1. claims: 1-17,24-26

A porous, compressible embolization particle having a diameter from 1,000 to 10,000 microns when expanded, and the use and making thereof.

2. claims: 18,19

A method of loading an embolization particle into a catheter.

3. claims: 20-22

A method of embolization comprising urging compressed embolization particles through a catheter.

4. claim: 23

A method of embolization comprising two embolization devices.

INTERNATIONAL SEARCH REPORT

Information on patent family members

International application No

PCT/US2007/061322

Patent document cited in search report		Publication date	Patent family member(s)	Publication date
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