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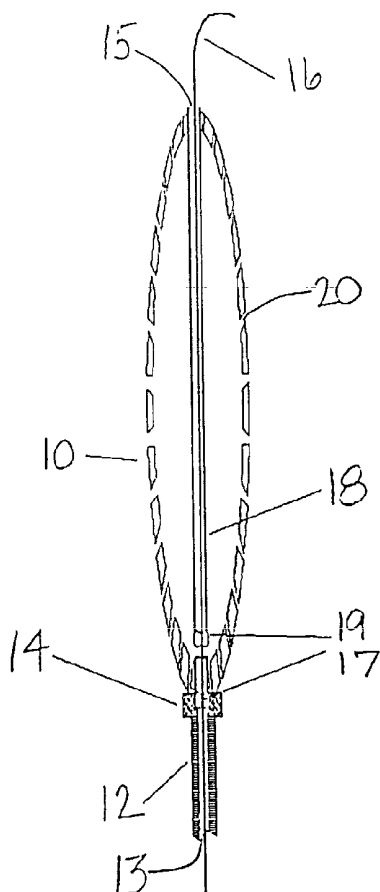
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- (71) Applicant: **SCIMED LIFE SYSTEMS, INC.** [US/US]; One SciMed Place, Maple Grove, MN 55311-1566 (US). **(84) Designated States (regional):** ARIPO patent (GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW),
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[Continued on next page]

(54) Title: TELECTIVELY PERMEABLE, HIGHLY DISTENSIBLE OCCLUSION BALLOON



(57) Abstract: A process and apparatus for occluding a vascular site. A catheter (12) having a highly distensible occlusion balloon (10) detachably mounted at a distal end thereof; is provided to the vascular site and at least partially filled with an aqueous balloon (10) inflation fluid which allows the balloon (10) placement to be imaged. The balloon is porous to the aqueous inflation fluid and the inflation fluid is gradually displaced through the balloon pores (20) by a liquid filling composition which is solidifiable on contact with the aqueous inflation fluid to produce a mass to which the balloon (10) is nonporous. The filling composition is injected to bring the balloon wall into contact with the vessel wall at the vascular site. The balloon (10) is detached from the catheter (12) after the filling composition has at least substantially solidified and the catheter (12) removed from the body.

WO 02/051320 A3





Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM),
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GB, GR, IE, IT, LU, MC, NL, PT, SE, TR), OAPI patent
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Published:

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INTERNATIONAL SEARCH REPORT

International Application No
PCT/US 01/49841

A. CLASSIFICATION OF SUBJECT MATTER IPC 7 A61B17/12		
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 7 A61B		
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	US 4 364 392 A (STROTHER ET AL.) 21 December 1982 (1982-12-21) cited in the application the whole document	1-8, 10, 11, 13
Y A	---	12, 14, 54 15, 28
X	WO 98 57586 A (HUDSON ET AL.) 23 December 1998 (1998-12-23) abstract; claims 1, 13, 25; figures page 17, line 25 -page 18, line 7	37, 39-41
Y	---	12, 54
X	US 4 327 734 A (WHITE, JR.) 4 May 1982 (1982-05-04) the whole document	1-8, 13
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<input checked="" type="checkbox"/> Further documents are listed in the continuation of box C.		
<input checked="" type="checkbox"/> Patent family members are listed in annex.		
° Special categories of cited documents :		
A document defining the general state of the art which is not considered to be of particular relevance	*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	
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O document referring to an oral disclosure, use, exhibition or other means	*&* document member of the same patent family	
P document published prior to the international filing date but later than the priority date claimed		
Date of the actual completion of the international search 19 July 2002	Date of mailing of the international search report 26/07/2002	
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 Giménez Burgos, R	

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	WO 00 27292 A (MV MEDICAL DEVICES, INC.) 18 May 2000 (2000-05-18) abstract; figures 13-16 page 9, line 1 -page 10, line 15	15,21, 22, 24-27, 37,39-41
Y		14
A		28
A	US 5 779 672 A (DORMANDY, JR.) 14 July 1998 (1998-07-14) cited in the application abstract; figures column 6, line 8-28	15-17, 21,24-28

INTERNATIONAL SEARCH REPORT

International application No.
PCT/US 01/49841

Box I Observations where certain claims were found unsearchable (Continuation of item 1 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.: 44-53
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 II Observations where unity of invention is lacking (Continuation of item 2 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.

No protest accompanied the payment of additional search fees.

INTERNATIONAL SEARCH REPORT

Information on patent family members

International Application No
PCT/US 01/49841

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