

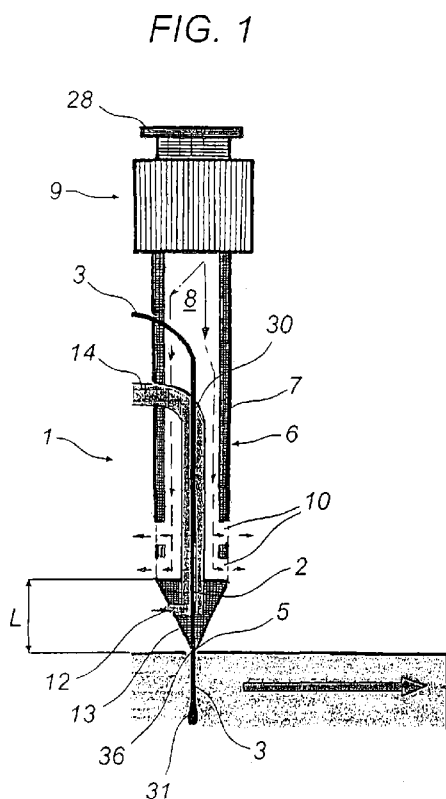


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[Continued on next page]

- (54) Title: A DEVICE FOR THE HAEMOSTASIS OF VASCULAR PUNCTURES



- (57) Abstract: A device for the haemostasis of vascular punctures, comprising a cylindrical dispensing element (6), associated with a guide thread (3) and containing a quantity of haemostatic agent (8), with a proximal extremity (9) accessible to an operator and at least one opening (10) for the dispensing of the haemostatic agent in the percutaneous region comprised between the vessel wall and the epidermal surface, and also comprising means for the positioning of a distal extremity (13) of the device with respect to the puncture of the vessel.



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- *with international search report (Art. 21(3))*
- *before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments (Rule 48.2(h))*

INTERNATIONAL SEARCH REPORT

International application No
PCT/IB2009/000239

A. CLASSIFICATION OF SUBJECT MATTER INV. A61B17/00		
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) 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		
C. DOCUMENTS CONSIDERED TO BE RELEVANT		
Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 5 728 132 A (VAN TASSEL ROBERT A [US] ET AL) 17 March 1998 (1998-03-17) column 2, line 30 - column 6, line 48 claim 4 figures 1,4	1, 2, 9, 11-13, 18, 19
X	WO 00/33744 A (UNIV VIRGINIA [US]) 15 June 2000 (2000-06-15) page 1, lines 9-11 page 4, line 20 - page 5, line 8 page 9, line 8 - page 15, line 11 page 18, lines 6-12 figures 1-2B, 5-7A, 7C	1, 3, 9, 11, 12, 14, 15
A	----- -/--	2, 10
<input checked="" type="checkbox"/> Further documents are listed in the continuation of Box C. <input checked="" type="checkbox"/> 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 20 May 2009		Date of mailing of the international search report 15/09/2009
Name and mailing address of the ISA/ European Patent Office, P.B. 5818 Patentlaan 2 NL - 2280 HV Rijswijk Tel. (+31-70) 340-2040, Fax: (+31-70) 340-3016		Authorized officer Kakoullis, Marios

INTERNATIONAL SEARCH REPORT

International application No

PCT/IB2009/000239

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 00/12018 A (ADVANCED CLOSURE SYSTEMS INC [US]; CRUISE GREGORY M [US]; HNOJEWYJ OLE) 9 March 2000 (2000-03-09) page 1, lines 5-19 page 3, line 7 - page 6, line 8 page 12, lines 15-31 page 13, line 20 - page 16, line 20 page 19, line 13 - page 20, line 25 page 38, lines 8-24 page 42, line 27 - page 43, line 30 figures 2,3,6,14-16,18 -----	1,2,9, 18,19
X	US 5 855 559 A (VAN TASSEL ROBERT A [US] ET AL) 5 January 1999 (1999-01-05) column 2, lines 25-39 column 3, line 66 - column 4, line 13 column 5, line 35 - column 7, line 65 figures 1,3,8-10 -----	1,9,12, 13,18
A	-----	11

INTERNATIONAL SEARCH REPORT

International application No.
PCT/IB2009/000239

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:

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 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.:

see annex

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.

FURTHER INFORMATION CONTINUED FROM PCT/ISA/ 210

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

1. claims: 1-3,9,11-15,18,19

A device for the haemostasis of vascular punctures of the type claimed, wherein said guide and said dispenser are parallel and said dispensing opening is arranged at a distal extremity of the cylindrical body.

2. claims: 4-8

A device for the haemostasis of vascular punctures of the type claimed, wherein said opening is normally closed by a valve that can be opened on demand by the effect of a pressure.

3. claim: 10

A device for the haemostasis of vascular punctures of the type claimed, wherein said haemostatic agent is a two-component haemostatic agent, for example Tissucol (TM) and said cylindrical body comprises two respective separate containment chambers each with a dispensing window.

4. claims: 16, 17

A device for the haemostasis of vascular punctures of the type claimed, wherein said guide comprises a distal extremity of variable diameter through which the opening of the distal extremity of the device can be closed on demand for the purpose of avoiding the entrance of arterial blood through the opening itself.

5. claim: 20

A device for the haemostasis of vascular punctures of the type claimed, wherein said positioning means comprise a radio-opaque element detectable from outside.

6. claim: 21

A device for the haemostasis of vascular punctures of the type claimed, comprising a washer that can be mounted to slide externally with respect to the body of the device and kept in contact with the epidermal surface of the patient with the purpose of avoiding the escape of haemostatic material from the percutaneous region during extraction of the device.

FURTHER INFORMATION CONTINUED FROM PCT/ISA/ 210

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INTERNATIONAL SEARCH REPORT

Information on patent family members

International application No

PCT/IB2009/000239

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