



DOCUMENTS CONSIDERED TO BE RELEVANT			
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (IPC)
A	WO 99/56801 A2 (MICROVENTION INC [US]) 11 November 1999 (1999-11-11) * page 20, line 18 - page 21, line 2; figure 5c *	1,5	INV. A61B17/22
A	WO 99/16365 A (SCIMED LIFE SYSTEMS INC [US]) 8 April 1999 (1999-04-08) * page 7, line 8 - page 8, line 15; figure 6b *	1,10	
			TECHNICAL FIELDS SEARCHED (IPC)
			A61B
The supplementary search report has been based on the last set of claims valid and available at the start of the search.			
Place of search Munich		Date of completion of the search 27 February 2007	Examiner Nistor, Loredana
CATEGORY OF CITED DOCUMENTS X : particularly relevant if taken alone Y : particularly relevant if combined with another document of the same category A : technological background O : non-written disclosure P : intermediate document T : theory or principle underlying the invention E : earlier patent document, but published on, or after the filing date D : document cited in the application L : document cited for other reasons & : member of the same patent family, corresponding document			



CLAIMS INCURRING FEES

The present European patent application comprised at the time of filing more than ten claims.

☐ Only part of the claims have been paid within the prescribed time limit. The present European search report has been drawn up for the first ten claims and for those claims for which claims fees have been paid, namely claim(s):

☐ No claims fees have been paid within the prescribed time limit. The present European search report has been drawn up for the first ten claims.

LACK OF UNITY OF INVENTION

The Search Division considers that the present European patent application does not comply with the requirements of unity of invention and relates to several inventions or groups of inventions, namely:

see sheet B

☐ All further search fees have been paid within the fixed time limit. The present European search report has been drawn up for all claims.

☐ As all searchable claims could be searched without effort justifying an additional fee, the Search Division did not invite payment of any additional fee.

☐ Only part of the further search fees have been paid within the fixed time limit. The present European search report has been drawn up for those parts of the European patent application which relate to the inventions in respect of which search fees have been paid, namely claims:

☒ None of the further search fees have been paid within the fixed time limit. The present European search report has been drawn up for those parts of the European patent application which relate to the invention first mentioned in the claims, namely claims:

see annex



The Search Division considers that the present European patent application does not comply with the requirements of unity of invention and relates to several inventions or groups of inventions, namely:

1. claims: 1-19

A vascular obstruction removal catheter comprising a flexible tubular body, an outer shearing member and an inner shearing member rotatably disposed within the outer shearing member and rotating along its inner surface.

1.1. claims: 1-9, 11-13, 15-19

A vascular obstruction removal catheter comprising a flexible tubular body, an outer shearing member and an inner shearing member rotatably disposed within the outer shearing member and rotating along its inner surface, the catheter further comprising an expansible covering.

1.2. claim: 10

A vascular obstruction removal catheter comprising a flexible tubular body, an outer shearing member and an inner shearing member rotatably disposed within the outer shearing member and rotating along its inner surface and wherein the struts have protrusions to inhibit sliding of the obstructive material.

1.3. claim: 14

A vascular obstruction removal catheter comprising a flexible tubular body, an outer shearing member and an inner shearing member rotatably disposed within the outer shearing member and rotating along its inner surface, the catheter further comprising an occlusion penetrator with at least one end cutter that rotates with the inner shearing member.

2. claim: 20

a device for treating a total occlusion having a catheter body, a radially expansible positioning cage and a shaft advanceable into the total occlusion.

Please note that all inventions mentioned under item 1, although not necessarily linked by a common inventive concept, could be searched without effort justifying an additional fee.

**ANNEX TO THE EUROPEAN SEARCH REPORT
ON EUROPEAN PATENT APPLICATION NO.**

EP 01 92 6502

This annex lists the patent family members relating to the patent documents cited in the above-mentioned European search report.
The members are as contained in the European Patent Office EDP file on
The European Patent Office is in no way liable for these particulars which are merely given for the purpose of information.

27-02-2007

Patent document cited in search report		Publication date	Patent family member(s)	Publication date
WO 9956801	A2	11-11-1999	AU 767873 B2	27-11-2003
			AU 3780199 A	23-11-1999
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			JP 2001506175 T	15-05-2001

专利名称(译)	用于血栓和闭塞性材料去除的可扩张剪切导管		
公开(公告)号	EP1272110A4	公开(公告)日	2007-07-18
申请号	EP2001926502	申请日	2001-03-30
[标]申请(专利权)人(译)	血管BACCHUS		
申请(专利权)人(译)	BACCHUS血管INC.		
当前申请(专利权)人(译)	BACCHUS血管INC.		
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IPC分类号	A61B17/00 A61B17/22 A61B19/00 A61F2/84 A61M25/00 A61D1/02		
CPC分类号	A61B17/320725 A61B17/221 A61B17/320758 A61B17/320783 A61B2017/00685 A61B2017/22094 A61B2017/2212 A61B2090/08021		
代理机构(译)	WORK, 伊利亚		
优先权	60/193539 2000-03-31 US 60/260170 2001-01-04 US 09/820301 2001-03-27 US		
其他公开文献	EP1272110B1 EP1272110A1		
外部链接	Espacenet		

摘要(译)

装置，方法，试剂盒和方法从脉管系统和其他体腔中去除阻塞性物质。可膨胀的篮子可用作配合的径向可膨胀的剪切构件。每个篮子的螺旋定向支柱可以在均匀的圆周方向上卷绕。支柱可以是独立的柔性，允许剪切构件轴向一起弯曲。内篮可以被可旋转地驱动，并且可以使用从剪切构件和/或远侧穿透器向近侧延伸的轴向泵，用于推进阻塞导丝进入的闭塞。支柱可以基本上连续地彼此滑动，并且对于高效血栓切除术可以具有足够的侵略性。旋转静止且轴向柔性的外篮可提供安全的，有限的粥样斑块切除术治疗。