

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	US 2007/208293 A1 (MANSOUR HABAH NOSHY [US] ET AL) 6 September 2007 (2007-09-06) * abstract; figures * * paragraph [0032] * -----	1-4, 15	INV. A61M37/00 A61M5/168 A61M39/22 A61B5/00 A61H39/00 ADD. A61M27/00
			TECHNICAL FIELDS SEARCHED (IPC)
			A61M
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 Berlin		Date of completion of the search 15 August 2017	Examiner Schultz, Ottmar
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	

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EPO FORM 1503 03 82 (P04N04)

CLAIMS INCURRING FEES

The present European patent application comprised at the time of filing claims for which payment was due.

- Only part of the claims have been paid within the prescribed time limit. The present European search report has been drawn up for those claims for which no payment was due 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 those claims for which no payment was due.

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 (supplementary) 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 (supplementary) 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 (supplementary) European search report has been drawn up for those parts of the European patent application which relate to the first mentioned in the claims, namely claims:

1-4, 15

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: 1-4, 15

Detecting the degree of occlusion in an implanted
cerebrospinal fluid shunt.

2. claims: 5-14

Generating flow of cerebrospinal fluid in an implanted
cerebrospinal fluid shunt.

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

EP 11 78 4265

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.

15-08-2017

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
US 2007208293	A1	06-09-2007	NONE

专利名称(译)	CSF分路流量增强器，分流器中产生CSF流量的方法以及CSF分流系统部分和完全闭塞的评估		
公开(公告)号	EP2571564A4	公开(公告)日	2018-04-04
申请号	EP2011784265	申请日	2011-05-19
[标]申请(专利权)人(译)	SHUNTCHECK		
申请(专利权)人(译)	SHUNTCHECK INC.		
当前申请(专利权)人(译)	SHUNTCHECK INC.		
[标]发明人	SWOBODA MAREK HOCHMAN MATIAS GABRIEL MATTIUCCI MARK EVAN FRITZ FREDERICK J		
发明人	SWOBODA, MAREK HOCHMAN, MATIAS GABRIEL MATTIUCCI, MARK EVAN FRITZ, FREDERICK J.		
IPC分类号	A61M37/00 A61M5/168 A61M39/22 A61B5/00 A61H39/00		
CPC分类号	A61M27/002 A61M27/006		
审查员(译)	舒尔茨OTTMAR		
优先权	61/396044 2010-05-21 US 61/458969 2010-12-06 US		
其他公开文献	EP2571564A2		
外部链接	Espacenet		

摘要(译)

一种能够通过振动分流器，管道或分流阀圆顶或向分流系统的各个部分施加循环压力而在脑脊液（CSF）分流系统中产生流动的装置。还公开了一种产生流动的方法和在分流通畅评估中使用该装置的方法，例如，水力阻力评估。该装置结合热稀释方法或放射性核素方法，允许基于CSF分流电阻而不是单独使用CSF流量或颅内压（ICP）的快速CSF分流通畅评估。与其他方法相比，这提供了更客观的分流阻塞测量。此外，该装置可用于增强分流器中的流动，识别症状发生之前的部分闭塞，区分专利，部分闭塞和闭塞分流器。如果需要降低ICP或移动通过注射室或分流圆顶施用的药物，该装置可用于在分流器中产生流动。

DOCUMENTS CONSIDERED TO BE RELEVANT		Relevant to claim:	CLASSIFICATION OF THE APPLICATION (IPC)
Category	Classification of documents with location, where applicable, of relevant passages		
A	US 2007/208293 A1 (MANSOUR, HABAH NOSHY [US] ET AL) 6 September 2007 (2007-09-06) * abstract; figures; * paragraph [0032] * -----	1-4, 15	1B6 A61M37/00 A61M5/168 A61M39/22 A61B5/00 A61H39/00 A61M27/00
			TECHNICAL FIELD SEARCHED ** (IPC)
			A61M
<p>The supplementary search report has been based on the first set of claims valid at the start of the search.</p>			
<p>SEARCHED BY: Berlin</p>		<p>SEARCHED ON: 15 August 2017</p>	<p>SEARCHED BY: Schütz, Ottmar</p>
<p>CATEGORY OF CITED DOCUMENTS:</p> <p>1: priority document; 2: other document; 3: document of the same category; 4: document of another category; 5: non-patent literature; 6: intermediate document</p>			
<p>1: priority document; 2: other document; 3: document of the same category; 4: document of another category; 5: non-patent literature; 6: intermediate document</p>			