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Remarks:

EuroPCT application 04753977.0
(PCT/US2004/017269) continues as EP application
04078584.2 under Article 25(2)(a) PCT.

(54) **Biopsy and delivery device**

(57) A device and method for the obtaining a tissue biopsy and the delivery of a material to provide hemostasis, therapeutic agents or marker material is described that can be used in conjunction with either an aspiration biopsy or a cutting needle biopsy device. The device has an application chamber through which the biopsy mechanism, either a cutting needle device or aspiration needle, passes through. The mechanism for an aspiration biopsy has a biopsy cannula of constant cross section over its entire length connected to an aspiration and collecting chamber and at least one application channel of constant or varying cross section connected to a dispensing chamber integrally connected with the aspiration chamber. The cutting biopsy mechanism has a mechanical or electromechanical mechanism to rapidly fire a stylet with a biopsy trough into the intended tissue and then fire a biopsy cannula over the stylet to sever and retain tissue that has protruded into the biopsy trough. At least one application channel is formed by a tube centrally slipped over the biopsy cannula wall. To enable the collection of tissue specimens, the distal segment of the application channel forms a close fitting and concentric sheath around the biopsy cannula. The biopsy cannula wall projects out of the tube with its acute-angularly designed cutting edge and the tube end encloses an obtuse angle with the biopsy cannula. The proximal end of the application channel has a larger diameter than the distal end allowing for unobstructed flow of the application material past the biopsy cannula wall upon retraction of the biopsy cannula from the distal segment of the ap-

plication channel. The versatility of the invention permits its use in many applications, including, for example, liver biopsies, breast biopsies, laparoscopic surgery, and lymphadenectomy procedures.

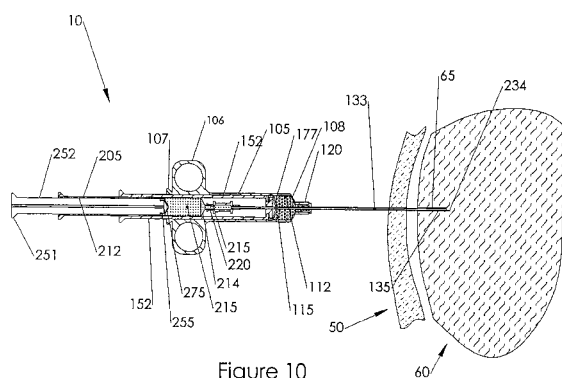


Figure 10



European Patent
Office

PARTIAL EUROPEAN SEARCH REPORT

Application Number

which under Rule 63 of the European Patent Convention EP 04 07 8584 shall be considered, for the purposes of subsequent proceedings, as the European search report

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 02/051300 A (KRAUSE WILLIAM R [US]; CLASSE FRANCIS C [US]) 4 July 2002 (2002-07-04) * page 10, paragraph 2 - page 14, paragraph 1; figures 4,5A *	1-10	INV. A61B10/00
A	EP 0 647 429 A (CITATION MEDICAL CORP [US]) 12 April 1995 (1995-04-12) * column 4, line 52 - column 7, line 27; figures 4-6 *	1-10	
A	US 5 320 110 A (WANG KO P [US]) 14 June 1994 (1994-06-14) * column 5, line 44 - column 6, line 55; figures 7-9 * * column 9, line 1 - line 43; figures 18-20 *	1-10	
A	WO 01/89389 A (H S HOSPITAL SERVICE S P A [IT]; PALMIERI BENIAMINO [IT] PALMIERI BENI) 29 November 2001 (2001-11-29) * page 4, line 23 - page 8, line 24; figures 1,2 *	11-18	
			TECHNICAL FIELDS SEARCHED (IPC)
			A61B
INCOMPLETE SEARCH The Search Division considers that the present application, or one or more of its claims, does/do not comply with the EPC to such an extent that a meaningful search into the state of the art cannot be carried out, or can only be carried out partially, for these claims. Claims searched completely : Claims searched incompletely : Claims not searched : Reason for the limitation of the search: see sheet C			
Place of search		Date of completion of the search	Examiner
Berlin		7 May 2008	Filali, Salima
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 (P04E07)

DOCUMENTS CONSIDERED TO BE RELEVANT			CLASSIFICATION OF THE APPLICATION (IPC)
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	
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X	US 5 830 153 A (KASS ERIK S [US]) 3 November 1998 (1998-11-03) * column 8, line 58 - column 9, line 13; figures 16,17 * * column 9, line 49 - line 62; figures 24-20 *	24	TECHNICAL FIELDS SEARCHED (IPC)
X	EP 0 970 658 A (ETHICON ENDO SURGERY INC [US]) 12 January 2000 (2000-01-12) * paragraph [0021] - paragraph [0026]; figures 1-3 *	24	
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European Patent
Office

**INCOMPLETE SEARCH
SHEET C**

Application Number
EP 04 07 8584

Claim(s) not searched:
19-23

Reason for the limitation of the search (non-patentable invention(s)):

Article 53 (c) EPC - Method for treatment of the human or animal body by surgery



European Patent
Office

Application Number

EP 04 07 8584

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:
- ☐ The present supplementary 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 (Rule 164 (1) EPC).



European Patent
Office

**LACK OF UNITY OF INVENTION
SHEET B**

Application Number
EP 04 07 8584

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: 1-10

Biopsy assembly comprising a material delivery device: a syringe barrel, a circular needle sheath, a hollow plunger and and a biopsy unit.

2. claims: 11-18

A material delivery device comprising a syringe barrel, a needle sheath, a hollow plunger and a distance guide.

3. claim: 24

A biopsy unit for taking tissue biopsies.

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

EP 04 07 8584

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.

07-05-2008

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EPO FORM P0459

For more details about this annex : see Official Journal of the European Patent Office, No. 12/82

专利名称(译)	活组织检查和输送装置		
公开(公告)号	EP1889572A3	公开(公告)日	2008-06-18
申请号	EP2004078584	申请日	2004-06-01
[标]申请(专利权)人(译)	KRAUSE WILLIAM - [R]		
申请(专利权)人(译)	KRAUSE , 威廉R.		
当前申请(专利权)人(译)	KRAUSE , 威廉R.		
[标]发明人	KRAUSE WILLIAM R		
发明人	KRAUSE, WILLIAM R.		
IPC分类号	A61B10/00		
CPC分类号	A61B10/0275 A61B10/0041 A61B10/0283 A61B2010/0208 A61B2017/00893 A61B2017/12004 A61B2090/3987		
优先权	60/475891 2003-06-04 US 60/474691 2003-05-30 US		
其他公开文献	EP1889572A2		
外部链接	Espacenet		

摘要(译)

描述了一种用于获得组织活检和递送材料以提供止血剂，治疗剂或标记物材料的装置和方法，其可以与抽吸活组织检查装置或切割针活组织检查装置结合使用。该装置具有应用室，活检机构（切割针装置或抽吸针）穿过该应用室。用于抽吸活组织检查的机构具有在其整个长度上具有恒定横截面的活组织检查套管，该活检套管连接到抽吸和收集室，并且至少一个具有恒定或变化横截面的施加通道连接到与抽吸室整体连接的分配室。切割活检机构具有机械或机电机制，以快速将具有活检槽的探针发射到预期组织中，然后在探针上方发射活检套管以切断和切割保留突出到活组织检查槽中的组织。通过在活检套管壁上中心滑动的管形成至少一个施加通道。为了能够收集组织样本，应用通道的远端段形成围绕活检套管的紧密配合和同心护套。活组织检查套管壁以其锐角设计的切割边缘从管中伸出，并且管端与活检套管围成钝角。施用通道的近端具有比远端更大的直径，允许在活检套管从施用通道的远端段收回时，施加材料无阻碍地流过活检套管壁。本发明的多功能性允许其在许多应用中使用，包括例如肝脏活组织检查，乳房活组织检查，腹腔镜手术和淋巴结切除术。程序。

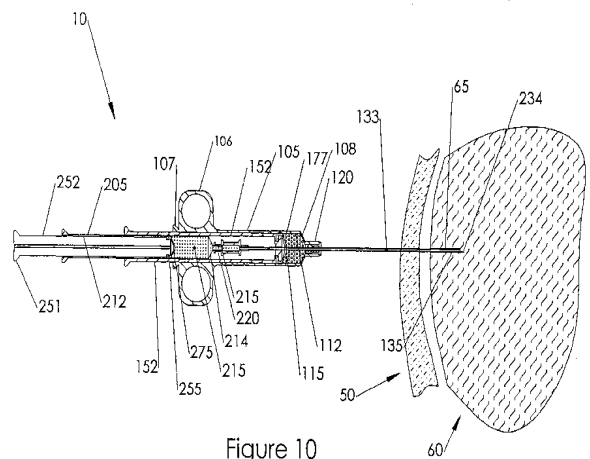


Figure 10