



DOCUMENTS CONSIDERED TO BE RELEVANT			
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (IPC)
X	US 5 924 989 A (POLZ HANS [DE]) 20 July 1999 (1999-07-20) * abstract; figures 1-7 * * column 6, line 42 - column 7, line 25 * -----	1-18	INV. A61B8/12 A61B8/13
X	US 2002/049375 A1 (STROMMER GERA M [IL] ET AL) 25 April 2002 (2002-04-25) * abstract; figures 1,6 * -----	1-18	
			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 Berlin		Date of completion of the search 22 January 2008	Examiner Jonsson, P.O.
<b>CATEGORY OF CITED DOCUMENTS</b> 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:
- ☒ 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).



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: 1-18

An ultrasonic diagnostic apparatus obtaining plural ultrasonic tomographic images at a process that an ultrasonic probe moves and scans within a body cavity of a body to be examined, the apparatus comprising: position information detecting means for detecting position information of plural ultrasonic tomographic images obtained in a process that the ultrasonic probe moves within a body cavity of a body to be examined; and tomographic parallel images constructing means for constructing plural tomographic parallel images arranged along a scan path of the ultrasonic probe based on the position information obtained by the position information detecting means. And an apparatus further comprising direction detecting means.

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2. claims: 19-32

An ultrasonic diagnostic apparatus moving an ultrasonic transducer within a body cavity of a body to be examined and creating plural chronological tomographic images in accordance with the movement, the apparatus comprising: position information detecting means for detecting position information of the ultrasonic transducer when the tomographic images are obtained; and auxiliary image creating means for creating an auxiliary image indicating position information of the tomographic images along a path of the movement of the ultrasonic transducer based on position information obtained by the position information detecting means and the tomographic images corresponding to the position information.

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The features common to all independent claims 1, 4 and 19, namely an ultrasonic diagnostic apparatus obtaining plural ultrasonic tomographic images at a process that an ultrasonic probe moves and scans within a body cavity of a body to be examined, the apparatus comprising position information detecting means are known in the art, see for instance US5294989, abstract and fig. 1.

The claims 1-18 are directed to tomographic parallel images constructing means whereas claims 19-32 relate to the creation of an auxiliary image creating means. In claims 19-32 the tomographic images from the ultrasonic transducer are claimed to be taken chronologically. These special technical features are different and are aimed at solving different problems. The requirements of Article 82 and Rule 44 EPC are therefore not met.

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

EP 03 74 8538

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.

22-01-2008

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
US 5924989 A	20-07-1999	NONE	
US 2002049375 A1	25-04-2002	US 2007287901 A1	13-12-2007

专利名称(译)	超声检查		
公开(公告)号	<a href="#">EP1504721A4</a>	公开(公告)日	2008-03-05
申请号	EP2003748538	申请日	2003-09-18
[标]申请(专利权)人(译)	奥林巴斯株式会社		
申请(专利权)人(译)	OLYMPUS CORPORATION		
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IPC分类号	A61B8/12 A61B8/13		
CPC分类号	A61B8/4461 A61B8/12 A61B8/14 A61B8/4254 A61B8/4416 A61B8/445 A61B8/463 A61B8/483		
优先权	2002288951 2002-10-01 JP 2002283802 2002-09-27 JP		
其他公开文献	EP1504721B1 EP1504721A1		
外部链接	<a href="#">Espacenet</a>		

#### 摘要(译)

该超声波诊断装置包括：图像构建电路（31），用于产生由超声波内窥镜在体腔内移动的处理产生的多个超声波断层图像，位置检测部分（13），用于检测超声波断层图像的位置信息，图像处理电路（33），用于构建由基于位置信息沿超声波内窥镜的扫描路径排列多个超声波断层图像得到的断层图像，以及使监视器（14）显示的显示电路（34）超声波断层扫描图像和断层平行图像，以便比较它们。在该超声波诊断装置中，当在监视器上显示超声波图像时，基于体腔内的超声波图像数据显示患部的侵入的扩散和深度。