



(12) **EUROPEAN PATENT APPLICATION**

(88) Date of publication A3:
19.08.2009 Bulletin 2009/34

(51) Int Cl.:
B06B 1/06 (2006.01)

(43) Date of publication A2:
06.02.2002 Bulletin 2002/06

(21) Application number: **01118495.9**

(22) Date of filing: **01.08.2001**

(84) Designated Contracting States:
AT BE CH CY DE DK ES FI FR GB GR IE IT LI LU MC NL PT SE TR
Designated Extension States:
AL LT LV MK RO SI

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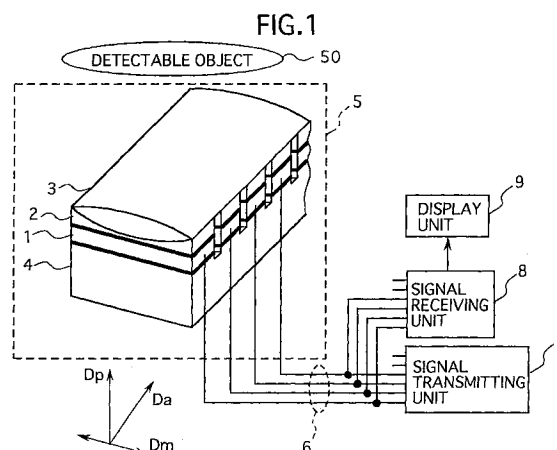
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(30) Priority: **02.08.2000 JP 2000234854**

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(54) **Ultrasonic diagnostic apparatus**

(57) Herein disclosed is an ultrasonic diagnostic apparatus for observing a detectable object to be ultrasonically diagnosed. This apparatus comprises an ultrasonically diagnostic probe unit (5) for probing the detectable object (50) with the ultrasonic waves in response to input pulse signals and with the ultrasonic echo from the detectable object (50), a signal transmitting unit (7) operatively connected with the ultrasonic diagnostic probe unit (5) to generate the input pulse signals to be transmitted into the ultrasonic waves (5), a signal receiving unit (8) operatively connected with the ultrasonically diagnostic probe unit (5) for receiving the ultrasonic echo from the detectable object (50) and processing output signals to be converted into the image of the object (50) being observed, a display unit (9) connected with the signal receiving unit (8) to display the image of the object (50) based on the output signals from the signal receiving unit (8) to ensure the ultrasonically diagnosed state of the detectable object (50). The ultrasonically diagnostic probe unit (5) comprises an oscillation body (1) having a pair of piezoelectric layers (11 and 12), an intermediate layer (14) sandwiched by the piezoelectric layers (11 and 12), an acoustic lens body (3) operative to focus the ultrasonic waves to be emitted to and reflected by the object (50) and a supporting body (4) having the oscillation body (1) mounted thereon, thereby making it possible to provide an ultrasonic diagnostic apparatus with a readily machinable oscillation body (1) and to facilitate the machining and adhesive processes of the oscillation body (1).





EUROPEAN SEARCH REPORT

Application Number
EP 01 11 8495

DOCUMENTS CONSIDERED TO BE RELEVANT			
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (IPC)
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A	* column 1, line 47 - line 48 * * column 5, line 53 - column 6, line 6 * * column 7, line 16 - line 40 * * figure 5 *	2-10,14, 17	
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A	* column 7, line 30 * * column 8, line 32 - line 35 *	2-17	
A	US 5 957 851 A (HOSSACK JOHN [US]) 28 September 1999 (1999-09-28) * column 9, line 24 - line 55 *	1-17	
			TECHNICAL FIELDS SEARCHED (IPC)
			B06B G10K
The present search report has been drawn up for all claims			
Place of search The Hague		Date of completion of the search 15 July 2009	Examiner Swartjes, Harrie
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 (P04C01)

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

EP 01 11 8495

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
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15-07-2009

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US 5957851	A	28-09-1999	NONE	

专利名称(译)	超声诊断设备		
公开(公告)号	EP1177837A3	公开(公告)日	2009-08-19
申请号	EP2001118495	申请日	2001-08-01
申请(专利权)人(译)	松下电器产业有限公司.		
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IPC分类号	B06B1/06 A61B8/00 G10K11/30 H04R1/26 H04R17/00		
CPC分类号	B06B1/064 G10K11/30		
优先权	2000234854 2000-08-02 JP		
其他公开文献	EP1177837A2		
外部链接	Espacenet		

摘要(译)

这里公开了一种用于观察要被超声诊断的可检测物体的超声诊断设备。该装置包括超声诊断探头单元（5），用于响应于输入脉冲信号和来自可检测物体（50）的超声回波用超声波探测可检测物体（50），信号发射单元（7）可操作地与超声诊断探头单元（5）连接以产生输入脉冲信号以传输到超声波（5）中，信号接收单元（8）与超声诊断探头单元（5）可操作地连接，用于接收超声回波从可检测物体（50）和处理输出信号转换成被观察物体（50）的图像，显示单元（9）连接信号接收单元（8）以基于来自信号接收单元（8）的输出信号显示对象（50）的图像，以确保可检测对象（50）的超声诊断状态。超声诊断探头单元（5）包括具有一对压电层（11和12）的振荡体（1），夹在压电层（11和12）之间的中间层（14），声透镜体（3）可操作地聚焦超声波以发射到物体并由物体反射（50d），其上安装有振荡体（1）的支撑体（4），从而可以提供具有易于加工的振荡体的超声波诊断设备。（1）并且便于振荡体的加工和粘合过程（1）。

