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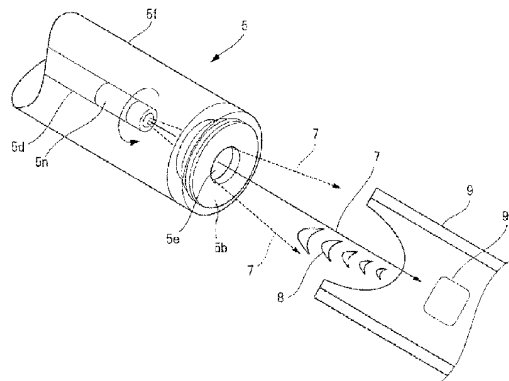
**(54) ULTRASOUND IMAGING PROBE, MANUFACTURING METHOD THEREOF, AND ULTRASONIC IMAGING DEVICE**

(57) An ultrasound imaging probe capable of securing an assembly accuracy of and improving a resolution performance of an obtained image is provided.

A photoacoustic catheter 5 includes: a silicon substrate 5a which includes an ultrasonic transducer 5b for detecting an ultrasonic wave formed thereon and a through hole 5c passing through front and rear surfaces;

an optical fiber 5d which oscillates a laser 7; a lens 5e which condenses the laser 7 and is arranged within the through hole 5c; a tubular housing 5f; a glass cover 5i which covers the lens 5e; and a resin 5g which fills a gap 10 between the through hole 5c and the lens 5e. Further, the silicon substrate 5a and the optical fiber 5d are fixed to a part of the housing 5f in the housing 5f.

[FIG. 2]



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EUROPEAN SEARCH REPORT

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Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (IPC)
X	CN 103 969 192 A (UNIV JIANGXI NORMAL SCI & TECH) 6 August 2014 (2014-08-06) * figures 1-3 * * paragraphs [0014], [0016], [0018] - [0020] *	1-14	INV. B06B1/02 A61B8/00 A61B5/00
A	----- US 2007/287912 A1 (KHURI-YAKUB BUTRUS T [US] ET AL) 13 December 2007 (2007-12-13) * the whole document *	1-14	
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			TECHNICAL FIELDS SEARCHED (IPC)
			B06B A61B
The present search report has been drawn up for all claims			
Place of search The Hague		Date of completion of the search 28 May 2019	Examiner Parmentier, Hélène
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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ANNEX TO THE EUROPEAN SEARCH REPORT  
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For more details about this annex : see Official Journal of the European Patent Office, No. 12/82

专利名称(译)	超声成像探头，其制造方法和超声成像装置		
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其他公开文献	EP3495054A2		
外部链接	<a href="#">Espacenet</a>		

摘要(译)

提供了一种能够确保所获得图像的组装精度并改善其分辨率性能的超声成像探头。光声导管5包括：硅基板5a，其包括用于检测在其上形成的超声波的超声换能器5b和穿过前表面和后表面的通孔5c；光纤5d振荡激光器7；透镜5e，其聚光激光器7并设置在通孔5c内；管状壳体5f；覆盖透镜5e的玻璃盖5i；树脂5g填充通孔5c和透镜5e之间的间隙10。此外，硅衬底5a和光纤5d固定到壳体5f中的壳体5f的一部分。

[FIG. 2]

