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(54) **Focused ultrasound transducers and systems**

(57) The present invention provides ultrasound transducers, and imaging assemblies and catheters employing such transducers, that provide improved imaging capabilities. In one embodiment, an ultrasound imaging assembly (50) includes a housing having a distal end (56), a proximal end (57) and a longitudinal axis. A transducer element (54) is included having an outer face. The outer face has a first radius of curvature along a first axis and a second radius of curvature along a second axis. The transducer element is operably attached to the distal end to position the first axis to be generally parallel to the longitudinal axis to provide improved cross-plane resolution.

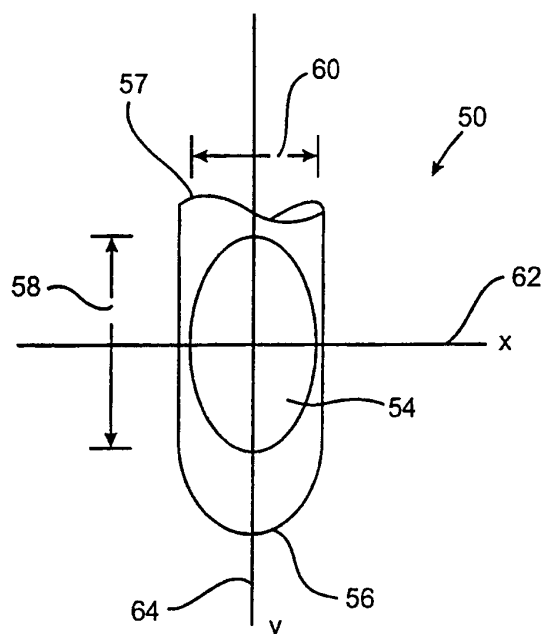


FIG. 3A



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Office

EUROPEAN SEARCH REPORT

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EP 06 07 6470

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Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (IPC)
X	US 4 572 201 A (KONDO SHINICHI ET AL) 25 February 1986 (1986-02-25)	1,8,9, 16,17	INV. A61B8/00
A	* column 2, line 19 - column 4, line 2; figures 1-3 *	3,5,7, 15,19	A61B8/12

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	* column 5, line 1 - column 6, line 7; figures 1,2 *		

A	US 4 248 090 A (GLENN WILLIAM E) 3 February 1981 (1981-02-03)	1,15,16	
	* column 7, line 53 - column 8, line 36; figures 3-7 *		

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	* abstract; figure 1 *		

			TECHNICAL FIELDS SEARCHED (IPC)
			A61B G10K
The present search report has been drawn up for all claims			
Place of search Munich		Date of completion of the search 31 May 2007	Examiner ARTIKIS, T
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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EP 06 07 6470

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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专利名称(译)	聚焦超声换能器和系统		
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外部链接	Espacenet		

摘要(译)

本发明提供了超声换能器，以及采用这种换能器的成像组件和导管，其提供了改进的成像能力。在一个实施例中，超声成像组件（50）包括壳体，壳体具有远端（56），近端（57）和纵向轴线。包括具有外表面的换能器元件（54）。外表面沿第一轴具有第一曲率半径，沿第二轴具有第二曲率半径。换能器元件可操作地连接到远端，以将第一轴线定位成大致平行于纵向轴线，以提供改善的跨平面分辨率。

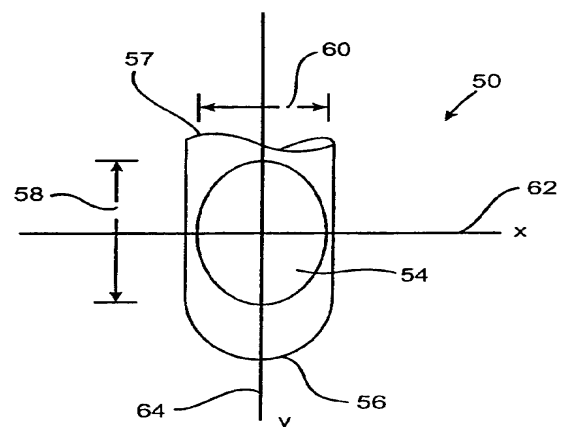


FIG. 3A