

(11) Publication number:

0 190 948

**A3** 

(12)

## **EUROPEAN PATENT APPLICATION**

(21) Application number: 86300880.1

(51) Int. Cl.3: G 10 K 11/34

22) Date of filing: 10.02.86

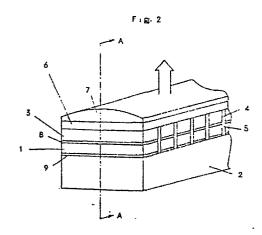
(30) Priority: 08.02.85 JP 23875/85 08.02.85 JP 23876/85 08.02.85 JP 23877/85

- (43) Date of publication of application: 13.08.86 Bulletin 86/33
- 88 Date of deferred publication of search report: 12.08.87
- Designated Contracting States:
   DE FR GB

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(54) Ultrasonic probe.

(5) An ultrasonic probe for an ultrasonic medical diagnostic apparatus which is composed of a plurality of piezoelectric vibrators (1) with electrodes (8, 9) attached onto both surfaces thereof and one or two acoustic matching layers (3, 6) which are provided on the surface of one electrode (8) of the piezoelectric vibrator. One of the acoustic matching layers is made of thermosetting resin such as epoxy resin mixed with carbonyl group material. A backing load member (2) which is made of epoxy resin or rubber material mixed with microspheres and metal or insulator powder is provided on the surface of the other electrode (9) of the piezoelectric vibrator. A filler material (5) which is made of rubber material or thermosetting resin is filled between each of said piezoelectric vibrators.







## **EUROPEAN SEARCH REPORT**

EP 86 30 0880

Category	Citation of document wo	vith indication, where appropriate, evant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (Int. Cl.4)
Y	Jersey, US, pag New York, US; C al.: "Highly ef transducer arra nondestructive applications"	th - 27th Cherry Hill, New es 111-116, IEEE, .S. DESILETS et ficient ys useful in testing column 1, lines	1-4,6, 9,11- 15	G 10 K 11/3
Y	EP-A-0 128 049  * Page 1, line	24 - page 3. line	1-4,6, 9,11- 15	
	lines 1-14 *	3,4,5,7; page 4,		TECHNICAL FIELDS SEARCHED (Int. Ci.4)
P,A	EP-A-0 142 318  * Claims 1,2; pa	,	1,4,5, 9,10, 12,13	G 10 K
A	JOURNAL OF ACOUS AMERICA, vol. 69 1981, pages 1505 Soc. Am., New You ROKHLIN et al.: properties of to composites"	5-1506, Acoust. ork, US; S. "Acoustic	1,4,5, 9,10, 12,13	
	·	-/-		
	The present search report has b			
Place of search THE HAGUE		Date of completion of the search 24-04-1987	Examiner HAASBROEK J.N.	
Y: par doc A: tecl	CATEGORY OF CITED DOCL ticularly relevant if taken alone ticularly relevant if sombined w sument of the same category hnological background n-written disclosure	E : earlier pat after the fi ith another D : document L : document	ent document, biling date cited in the app	ring the invention but published on, or lication easons



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DOCUMENTS CONSIDERED TO BE RELEVANT					Page 2	
Category	Citation of document with it		ite, Re	levant claim	CLASSIFICATION OF THE APPLICATION (Int. CI 4)	
A	DE-A-3 119 272 (	MATSUSHITA)				
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	Place of search 한다는 다시대다	Date of completion 24-04-19		HAAS	Examiner SBROEK J.N.	
THE HAGUE  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  D: 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  E: member of the same patent family, corresponding document						