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(71) Applicant: **Fuji Photo Film Co. Ltd.**
Kanagawa 250-0193 (JP)

(72) Inventor: **Ogawa, Eiji**
Ashigarakami-gun, Kanagawa 258-8538 (JP)

(74) Representative: **Klunker . Schmitt-Nilson . Hirsch**
Winzererstrasse 106
80797 München (DE)

(54) **Ultrasonic receiving apparatus and ultrasonic diagnosing apparatus using the same**

(57) An ultrasonic receiving apparatus in which ultrasonic wave signals can be detected in a two-dimensional manner without necessities of electric-wiring works to a large number of very fine elements, and without increase of crosstalk and impedance. The ultrasonic receiving apparatus can be manufactured in low cost. This ultrasonic receiving apparatus includes an ultrasonic detecting element 20 having a reception plane capable of receiving ultrasonic waves, for modulating light on the basis of ultrasonic waves applied to the respective positions of the reception plane; and a photodetector 16 having a plurality of pixels, for detecting light output from corresponding positions of the ultrasonic detecting element.

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Application Number
EP 02 02 1187

DOCUMENTS CONSIDERED TO BE RELEVANT

Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (Int.Cl.7)
X	WILKENS V ET AL: "OPTICAL MULTILAYER DETECTION ARRAY FOR FAST ULTRASONIC FIELD MAPPING" OPTICS LETTERS, OPTICAL SOCIETY OF AMERICA, WASHINGTON, US, vol. 24, no. 15, 1 August 1999 (1999-08-01), pages 1026-1028, XP000973108 ISSN: 0146-9592	1-13, 16-24	G01S7/52 A61B8/00 G01S15/89
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Y	* abstract; figures 1,2,5,6 * * page 100, paragraph 1 - page 103, paragraph 1 * * pages 105-107 *	2-7, 18-23	TECHNICAL FIELDS SEARCHED (Int.Cl.7) G01S G02F G01H

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The present search report has been drawn up for all claims

Place of search	Date of completion of the search	Examiner
Munich	15 September 2004	Reuss, T

CATEGORY OF CITED DOCUMENTS

X : particularly relevant if taken alone
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A : technological background
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A	ARYA V ET AL: "APPLICATION OF THIN-FILM OPTICAL FILTERS TO THE TEMPERATURE COMPENSATION OF OPTICAL FIBER GRATING-BASED DEVICES" IEEE TRANSACTIONS ON INSTRUMENTATION AND MEASUREMENT, IEEE INC. NEW YORK, US, vol. 46, no. 5, 1 October 1997 (1997-10-01), pages 1173-1176, XP000766775 ISSN: 0018-9456 * the whole document *	15	
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ANNEX TO THE EUROPEAN SEARCH REPORT ON EUROPEAN PATENT APPLICATION NO. EP 02 02 1187

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15-09-2004

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		WO 0120318 A1	22-03-2001

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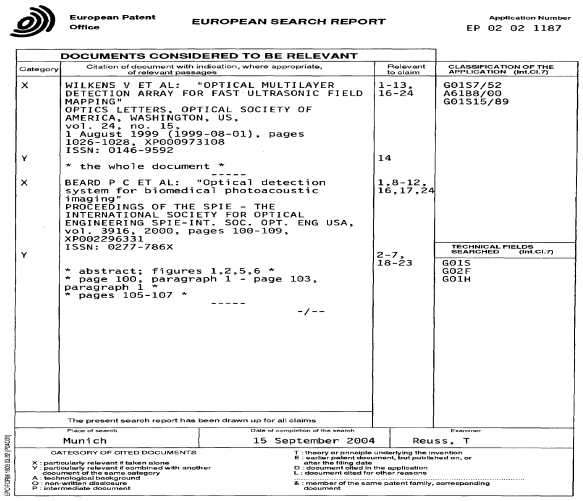
For more details about this annex : see Official Journal of the European Patent Office, No. 12/82

专利名称(译)	超声波接收装置和使用该装置的超声波诊断装置		
公开(公告)号	EP1298450A3	公开(公告)日	2004-11-10
申请号	EP2002021187	申请日	2002-09-24
[标]申请(专利权)人(译)	富士摄影胶片公司		
申请(专利权)人(译)	富士胶片CO.LTD.		
当前申请(专利权)人(译)	富士胶片株式会社		
[标]发明人	OGAWA EIJI		
发明人	OGAWA, EIJI		
IPC分类号	A61B5/00 A61B8/00 G01S7/52 G01S15/89 G02F1/11 H04R17/00		
CPC分类号	A61B5/0097 A61B5/0059 A61B8/00 G01S7/5205 G01S15/8968 G01S15/8993 G02F1/11 G02F2201/346		
优先权	2001296317 2001-09-27 JP		
其他公开文献	EP1298450B1 EP1298450A2		
外部链接	Espacenet		

摘要(译)

一种超声波接收装置，其中可以以二维方式检测超声波信号，而不需要电线，可以对大量非常精细的元件起作用，并且不会增加串扰和阻抗。超声波接收装置可以低成本制造。该超声波接收装置包括超声波检测元件20，该超声波检测元件20具有能够接收超声波的接收平面，用于基于施加到接收平面的各个位置的超声波来调制光。光电探测器16具有多个像素，用于检测从超声波探测元件的相应位置输出的光。



European Patent Office — EUROPEAN SEARCH REPORT — Application Number EP 02 02 1187

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X	BEARD P C ET AL: "Optical detection system for biomedical photoacoustic imaging" PROCEEDINGS OF THE SPIE - THE INTERNATIONAL SOCIETY FOR OPTICAL ENGINEERING SPIE-INT. SOC. OPT. ENG USA, vol. 3916, 2000, pages 100-109, XP002296331 ISSN: 0277-786X * abstract; figures 1,2,5,6 * * page 100, paragraph 1 - page 103, paragraph 1 * * pages 105-107 *	1,8-12, 16,17,24	
Y		2-7, 18-23	TECHNICAL FIELDS SEARCHED (Int.Cl.7) G01S G02F G01H

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