

Title (en)  
ULTRASOUND IMAGING ARRAY

Title (de)  
ULTRASCHALL-GRUPPENWANDLER ZUR BILDERZEUGUNG

Title (fr)  
RESEAU POUR IMAGERIE ULTRASONORE

Publication  
**EP 0772891 A4 19991103 (EN)**

Application  
**EP 95926677 A 19950713**

Priority  
• US 27875394 A 19940722  
• US 9508796 W 19950713

Abstract (en)  
[origin: WO9603777A1] A two-dimensional ultrasound camera (figure 3). An ultrasonic transducer piezo (41, 43, 45, 47, 49) is indium bump (52, 53) bonded to an integrated circuit (54). The integrated circuit (54) provides signal processing (20, 22) capabilities for a signal from each of a number of independent piezels (41, 43, 45, 47, 49). A 128 x 128 array of piezels (41, 43, 45, 47, 49) is constructed using a protective sealant cover (42) with an outer matching layer (44) and an inner matching layer (46) wherein the response of the layers (42, 44, 46, 48) are tuned to body tissue response. The array (12) provides C-scan capabilities.

IPC 1-7  
**H01L 41/08**

IPC 8 full level  
**G01B 17/00** (2006.01); **A61B 8/00** (2006.01); **B06B 1/06** (2006.01); **G01B 17/06** (2006.01); **G01S 7/521** (2006.01); **G06T 1/00** (2006.01); **H01L 41/08** (2006.01)

CPC (source: EP)  
**A61B 8/483** (2013.01); **B06B 1/0622** (2013.01)

Citation (search report)  
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• [A] US 5329498 A 19940712 - GREENSTEIN MICHAEL [US]  
• [A] WO 9307728 A1 19930415 - YOKOGAWA MEDICAL SYST [JP] & EP 0607443 A1 19940727 - YOKOGAWA MEDICAL SYST [JP]  
• [A] US 4740700 A 19880426 - SHAHAM YIFAL J [US], et al  
• [A] FR 2669423 A1 19920522 - ELECTRICITE DE FRANCE [FR]  
• [A] EP 0559963 A2 19930915 - HEWLETT PACKARD CO [US]  
• [A] DAVIDSEN R E ET AL: "TWO-DIMENSIONAL RANDOM ARRAYS FOR REAL TIME VOLUMETRIC IMAGING", ULTRASONIC IMAGING, vol. 16, no. 3, 1 July 1994 (1994-07-01), pages 143 - 153, XP000479790, ISSN: 0161-7346  
• See references of WO 9603777A1

Designated contracting state (EPC)  
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