

Title (en)  
POROUS MATCHING LAYER IN AN ULTRASONIC APPLICATOR

Publication  
**EP 0173864 B1 19890726 (DE)**

Application  
**EP 85109705 A 19850802**

Priority  
DE 3430161 A 19840816

Abstract (en)  
[origin: US4686409A] A material is disclosed for use as an adaptation layer in ultrasonic transducer units of the type which have a piezo-ceramic transducer. The material is porous, and the acoustic impedance of the material can be adjusted (in one embodiment, to 12x10<sup>6</sup> kg/cm<sup>2</sup>s) by adjusting the porosity of the material. In preferred embodiments, the material is piezo-electric and may have a porosity gradient.

IPC 1-7  
**G10K 11/02**

IPC 8 full level  
**A61B 8/00** (2006.01); **G10K 11/02** (2006.01); **H04R 1/22** (2006.01); **H04R 17/00** (2006.01)

CPC (source: EP US)  
**G10K 11/02** (2013.01 - EP US)

Cited by  
EP0171716A3; EP0629992A3; US11064292B2; EP0707898A3; EP0421286A3; EP0361757A3; GB2225426B

Designated contracting state (EPC)  
AT DE FR GB NL

DOCDB simple family (publication)  
**EP 0173864 A1 19860312; EP 0173864 B1 19890726**; AT E45054 T1 19890815; DE 3430161 A1 19860227; DE 3571887 D1 19890831; JP H0644837 B2 19940608; JP S6153899 A 19860317; US 4686409 A 19870811

DOCDB simple family (application)  
**EP 85109705 A 19850802**; AT 85109705 T 19850802; DE 3430161 A 19840816; DE 3571887 T 19850802; JP 17746785 A 19850812; US 75955985 A 19850726