

Title (en)  
PROCESS FOR MANUFACTURING ULTRASONIC TRANSDUCERS

Publication  
**EP 0498015 B1 19931006 (DE)**

Application  
**EP 91101712 A 19910207**

Priority  
EP 91101712 A 19910207

Abstract (en)  
[origin: EP0498015A1] The previously known process for manufacturing an ultrasonic transducer with a piezoelectric transducer element which is connected to an acoustic coupling layer which is composed, as a single uniform body, of oscillatory elastomer, has several disadvantages. Thus, for example the quality of the coupling layer itself cannot be tested but rather only the finished transducer so that if the coupling layer has inadequate properties in the case of a negative test result the entire transducer must be rejected. In addition, a complex device has hitherto been used for manufacture. The object of simplifying and improving the abovementioned process for manufacturing ultrasonic transducers whilst avoiding the stated disadvantages is achieved in that initially a preform made of elastomer (2) with centring contours (4) is produced and in a further process step the transducer element (1) is inserted into the elastomer body (2) accompanied by centring by means of the centring contours (4) and is connected to the coupling layer (3) of said body. <IMAGE>

IPC 1-7  
**B06B 1/06**

IPC 8 full level  
**H04R 17/00** (2006.01); **B06B 1/06** (2006.01); **H04R 31/00** (2006.01)

CPC (source: EP US)  
**B06B 1/067** (2013.01 - EP US); **Y10T 29/42** (2015.01 - EP US)

Cited by  
DE202004002107U1; DE102006026674A1; EP0766071A1; US5664456A; WO2004008432A1

Designated contracting state (EPC)  
CH DE FR GB IT LI SE

DOCDB simple family (publication)  
**EP 0498015 A1 19920812; EP 0498015 B1 19931006**; DE 59100463 D1 19931111; JP H04336799 A 19921124; US 5329682 A 19940719

DOCDB simple family (application)  
**EP 91101712 A 19910207**; DE 59100463 T 19910207; JP 4805892 A 19920203; US 9056293 A 19930712