

Title (en)  
Ultrasonic foil transducer

Title (de)  
Ultraschall-Folien-Wandler

Title (fr)  
Transducteur à feuilles ultrasoniques

Publication  
**EP 0971557 B1 20030813 (DE)**

Application  
**EP 99109344 A 19990531**

Priority  
DE 19825581 A 19980609

Abstract (en)  
[origin: DE19825581A1] The transformer comprises an insulating layer (3) between two electrically conductive films (9,10) made of a conductive plastic film. An Independent claim is made for a process for manufacturing the ultrasonic film transformer in which an electrically conductive film (9) is laminated with the insulating film (3) and a second conductive film (10) is applied to the laminated foil. Preferred Features: One conductive film is non-textured and forms a vibrating membrane while the second conductive film is textured to form individual electrodes and conductive paths and is mushroom shaped in cross-section.

IPC 1-7  
**H04R 1/00; H04R 17/00**

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

CPC (source: EP)  
**B06B 1/0688** (2013.01)

Citation (examination)  
EP 0825585 A2 19980225 - VOLKSWAGEN AG [DE]

Cited by  
US6882260B2

Designated contracting state (EPC)  
DE ES FR GB IT SE

DOCDB simple family (publication)  
**DE 19825581 A1 19991216**; DE 59906567 D1 20030918; EP 0971557 A2 20000112; EP 0971557 A3 20000209; EP 0971557 B1 20030813;  
ES 2205631 T3 20040501

DOCDB simple family (application)  
**DE 19825581 A 19980609**; DE 59906567 T 19990531; EP 99109344 A 19990531; ES 99109344 T 19990531