

Title (en)  
A COUPLING DEVICE

Publication  
**EP 0528910 A4 19931222 (EN)**

Application  
**EP 91909422 A 19910514**

Priority  
AU PK012490 A 19900514

Abstract (en)  
[origin: WO9118486A1] A device for matching acoustic impedance between an ultrasonic transducer (21) and a medium is disclosed. The device includes a body (20) comprising a material having a high acoustic impedance on an ultrasonic signal. The body contains a plurality of acoustic impedance matching horns (23) extending between two surfaces of the body wherein the mouths of the horns are disposed in one surface and the throats of the horns are disposed in another surface, the magnitudes of the lengths and flares of the horns are such that the horns are capable of transmitting the ultrasonic signal; and the magnitude of the flare of each horn is such so as to provide a substantially smooth transition in acoustic impedance to the ultrasonic signal between the mouth and throat of the horn.

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**H04R 1/30**

IPC 8 full level  
**G10K 11/02** (2006.01)

CPC (source: EP)  
**G10K 11/025** (2013.01)

Citation (search report)  
• [Y] US 2907837 A 19591006 - JOSEPH BRAMI  
• [Y] FR 2615958 A1 19881202 - RADARSON [FR]  
• [A] WIRELESS WORLD March 1974, HAYWARDS HEATH, GB pages 19 - 24 J. DINSDALE 'horn loudspeaker design'  
• See references of WO 9118486A1

Cited by  
EP3274664A4

Designated contracting state (EPC)  
AT BE CH DE DK ES FR GB GR IT LI LU NL SE

DOCDB simple family (publication)  
**WO 9118486 A1 19911128**; EP 0528910 A1 19930303; EP 0528910 A4 19931222

DOCDB simple family (application)  
**AU 9100206 W 19910514**; EP 91909422 A 19910514