

Title (en)  
WAVE-GUIDE ACOUSTIC TRANSFORMER

Title (de)  
AKUSTISCHER TRANSFORMATOR FÜR EINEN WELLENLEITER

Title (fr)  
TRANSFORMATEUR ACOUSTIQUE À GUIDE D'ONDES

Publication  
**EP 3022945 A1 20160525 (EN)**

Application  
**EP 14739964 A 20140513**

Priority  
• IT SS20130007 A 20130715  
• IT 2014000128 W 20140513

Abstract (en)  
[origin: WO2015008306A1] A wave-guide acoustic transformer is described, comprising: a membrane (4) having a cylindrical shape open at its sides, used as sound wave guide and omnidirectional acoustic passive radiator, a loudspeaker (3) adapted to send sound waves (7) inside the cylindrical membrane (4), an acoustically reflecting circular plug (5), a gasket (6) with the housings of the screws to be used for supporting the loudspeaker; the cylindrical membrane (4) receives energy only from the sound wave fronts traveling in the internal air volume and has a strongly anisotropic modulus of elasticity in parallel with the cylinder axis and along the circumference of the cylinder itself, the internal sound waves (7) not modifying the length of the cylinder since, along the axis, the elastic constant is very high, the internal sound waves (7) themselves being adapted to modify the circumference of the cylindrical membrane (4) since, along the circumference, the elastic constant is much lower.

IPC 8 full level  
**H04R 1/10** (2006.01)

CPC (source: EP)  
**H04R 1/2834** (2013.01)

Citation (search report)  
See references of WO 2015008306A1

Citation (examination)  
CARL BLEMMING: "Pringles Speaker", 11 July 2011 (2011-07-11), Retrieved from the Internet <URL:https://www.youtube.com/watch?v=oSh5qRfkMm0>

Designated contracting state (EPC)  
AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

Designated extension state (EPC)  
BA ME

DOCDB simple family (publication)  
**WO 2015008306 A1 20150122**; EP 3022945 A1 20160525; IT SS20130007 A1 20131014

DOCDB simple family (application)  
**IT 2014000128 W 20140513**; EP 14739964 A 20140513; IT SS20130007 A 20130715