

Title (en)  
INFLATABLE EAR DEVICE

Title (de)  
AUFBLASBARE OHRVORRICHTUNG

Title (fr)  
DISPOSITIF GONFLABLE POUR OREILLE

Publication  
**EP 2514220 A2 20121024 (EN)**

Application  
**EP 10775332 A 20100510**

Priority

- US 17688609 P 20090509
- US 23346509 P 20090812
- US 24231509 P 20090914
- US 25384309 P 20091021
- US 29797610 P 20100125
- US 2010034237 W 20100510

Abstract (en)  
[origin: WO2010132359A2] A diaphonic valve utilizing the principle of the Synthetic Jet is disclosed herein. A diaphonic valve pump is provided for the inflation of an in-ear balloon. More complex embodiments of the present invention include stacks of multiple synthetic jets generating orifices as well as an oscillating, thin polymer membrane. In one or more embodiments of the present invention, a novel application is provided for the creation of static pressure to inflate or to deflate an inflatable member (balloon). In addition, sound can be utilized to inflate or deflate an inflatable member in a person's ear for the purpose of listening to sound.

IPC 8 full level  
**H04R 25/00** (2006.01); **G10K 11/16** (2006.01); **H04R 1/10** (2006.01)

CPC (source: EP KR US)  
**G10K 11/16** (2013.01 - KR); **H04R 1/10** (2013.01 - KR); **H04R 1/1016** (2013.01 - EP US); **H04R 25/00** (2013.01 - KR); **H04R 25/652** (2013.01 - EP US); **H04R 25/656** (2013.01 - EP)

Citation (search report)  
See references of WO 2010132359A2

Cited by  
CN105357619A

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 SE SI SK SM TR

DOCDB simple family (publication)  
**WO 2010132359 A2 20101118**; **WO 2010132359 A3 20110224**; **WO 2010132359 A8 20120126**; AU 2010247865 A1 20120112; CA 2761585 A1 20101118; CN 102484761 A 20120530; EP 2514220 A2 20121024; JP 2012526498 A 20121025; KR 20120068767 A 20120627

DOCDB simple family (application)  
**US 2010034237 W 20100510**; AU 2010247865 A 20100510; CA 2761585 A 20100510; CN 201080030703 A 20100510; EP 10775332 A 20100510; JP 2012510044 A 20100510; KR 20117029645 A 20100510