

Title (en)  
Helmholtz resonance silencer

Title (de)  
Helmholtz-Resonanzdämpfer

Title (fr)  
Silencieux à résonance de Helmholtz

Publication  
**EP 2772905 A1 20140903 (EN)**

Application  
**EP 14153385 A 20140131**

Priority  
JP 2013038223 A 20130228

Abstract (en)

The present invention provides a Helmholtz resonance silencer capable of further improving its silencing effect without deviation of its resonant frequency from the frequency of sound to be silenced. The present invention is a Helmholtz resonance silencer including: a body having a cavity part (SC) therein; and a communication hole (18a) for communication between the cavity part (SC) and an outside of the body. The communication hole (18a) has a cross-sectional profile other than a precise circle so as to increase viscous resistance generated between the vibrating air in the communication hole (18a) and the surface defining the communication hole (18a).

IPC 8 full level  
**G10K 11/172** (2006.01)

CPC (source: EP)  
**G10K 11/172** (2013.01)

Citation (applicant)  
JP 2012051397 A 20120315 - HONDA MOTOR CO LTD

Citation (search report)

- [XA] US 7690410 B2 20100406 - KAMIYAMA YOUICHI [JP], et al
- [XA] US 2010078258 A1 20100401 - TANABE YOSUKE [JP], et al
- [XA] US 6021612 A 20000208 - DUNN STANLEY E [US], et al
- [A] US 5598479 A 19970128 - DODT THOMAS [DE], et al

Cited by  
CN113763914A; CN106098051A; CN114495886A

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)  
**EP 2772905 A1 20140903; EP 2772905 B1 20160127; JP 2014162456 A 20140908; JP 5719396 B2 20150520**

DOCDB simple family (application)  
**EP 14153385 A 20140131; JP 2013038223 A 20130228**