

Title (en)  
Vortex tube

Title (de)  
Vortexrohr

Title (fr)  
Tube à vortex

Publication  
**EP 2108902 A3 20141112 (EN)**

Application  
**EP 09156855 A 20090331**

Priority  
SE 0800805 A 20080410

Abstract (en)

[origin: EP2108902A2] The invention relates to a vortex tube (1) for the generation of cold air. The vortex tube comprises a tube body (2) with a wall (5), the inner wall surface (6) of which forms a channel (7) with a circular-cylindrical cross section. A vortex generator (8) is arranged in a first end (9) of the channel (7) and a flow limiting body (10) is arranged in a second end (11) of the channel (7). One or several outlet/s (12) for hot air is/are arranged at the second end (11) of the channel (7). The vortex generator (8) has an opening (13) through which cold air may leave the channel. A conduit (14) for the supply of compressed air to the vortex generator (8) runs through the wall (5) of the tube body (2) in parallel with the inner channel (7) from a rear end (3) of the tube body (2) up to an inlet (15) to the vortex generator (8).

IPC 8 full level  
**F25B 9/04** (2006.01)

CPC (source: EP SE US)  
**F25B 9/04** (2013.01 - EP SE US)

Citation (search report)

- [XYI] US 4973246 A 19901127 - BLACK JOHN V [US], et al
- [Y] US 3208229 A 19650928 - FULTON CHARLES D
- [Y] US 4333754 A 19820608 - PETER JOSEPH E
- [X] SU 542895 A1 19770115
- [X] SU 1044904 A1 19830930
- [X] JP S59183220 U 19841206
- [X] SU 511485 A1 19760425 & DATABASE WPI Week 197713, Derwent World Patents Index; AN 1977-23254Y

Cited by  
US2015308103A1; US10988923B2; CN103673369A; EP2713118A3; WO2022263882A1

Designated contracting state (EPC)  
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 TR

Designated extension state (EPC)  
AL BA RS

DOCDB simple family (publication)

**EP 2108902 A2 20091014; EP 2108902 A3 20141112; CN 101556092 A 20091014; SE 0800805 L 20091011; SE 532276 C2 20091201;**  
US 2009255272 A1 20091015

DOCDB simple family (application)

**EP 09156855 A 20090331; CN 200910134307 A 20090410; SE 0800805 A 20080410; US 41618709 A 20090401**