

Title (en)

AIR CYCLING FAN UNIT SILENCER AND METHOD OF SILENCING AN AIR CYCLING FAN UNIT

Title (de)

LUFTZIRKULATIONSGEBLÄSEEINHEIT UND VERFAHREN ZUR SCHALLDÄMPFUNG EINER LUFTZIRKULATIONSGEBLÄSEEINHEIT

Title (fr)

SILENCIEUX D'UNITÉ DE VENTILATEUR DE RECYCLAGE D'AIR ET PROCÉDÉ D'ATTÉNUATION DU BRUIT D'UNE UNITÉ DE VENTILATEUR DE RECYCLAGE D'AIR

Publication

**EP 2980500 A1 20160203 (EN)**

Application

**EP 15177510 A 20150720**

Priority

- GB 201413324 A 20140728
- GB 201500593 A 20150114

Abstract (en)

An air cycling fan unit silencer suitable to be placed at an outlet and/or inlet of a air cycling fan unit, wherein the silencer includes a first air flow changer. Furthermore, a second air flow changer may be spaced from the first air flow changer and arranged to create a plurality of substantially non-linear air flows. Although the non-linear air flows create turbulence, which is typically a source of noise generation at a frequency of around 500Hz - 2000Hz, advantageously it has been found that by forming one of the air flow changers and preferably both air flow changers from a sound absorbing material such as acoustic foam, the sound generated by air movement on the supply side of the unit can be substantially reduced.

IPC 8 full level

**F24F 13/02** (2006.01); **F04D 29/66** (2006.01); **F24F 13/24** (2006.01)

CPC (source: EP GB)

**F04D 29/663** (2013.01 - EP); **F24F 13/24** (2013.01 - EP GB); **F24F 13/0263** (2013.01 - EP); **F24F 2013/242** (2013.01 - EP GB)

Citation (search report)

- [I] US 8584795 B1 20131119 - BUCKNER DON M [US]
- [I] EP 1098146 A2 20010509 - JEVEN OY [FI]

Cited by

US11674716B2

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 2980500 A1 20160203**; GB 201413324 D0 20140910; GB 201500593 D0 20150225; GB 2528686 A 20160203; GB 2528734 A 20160203

DOCDB simple family (application)

**EP 15177510 A 20150720**; GB 201413324 A 20140728; GB 201500593 A 20150114