

Title (en)
CENTRIFUGAL IMPELLER

Title (de)
ZENTRIFUGALLAUFRAD

Title (fr)
ROUE CENTRIFUGE

Publication
EP 2035712 A1 20090318 (EN)

Application
EP 07732575 A 20070426

Priority
• GB 2007001538 W 20070426
• GB 0612993 A 20060630

Abstract (en)
[origin: WO2008001033A1] A low-noise centrifugal fan impeller has a multi-cellular form of construction comprising a multiplicity of individual radial flow channels (5) disposed in a circumferential and longitudinal array with respect to the axis of rotation. This increases the "blade passing frequency" as compared to a conventional impeller and since higher frequencies have lower energy for a given flow output the total amplitude of the noise generated can be reduced. Each channel (5) extends from a respective channel inlet to a respective channel outlet which is offset from the respective inlet in the longitudinal direction of the impeller, and involves an increase in the internal dimension of the respective channel in the direction parallel to the axis of rotation, thus assisting deceleration and compression of the air or other medium being conveyed as it flows through the channels.

IPC 8 full level
F04D 29/28 (2006.01); **F04D 29/66** (2006.01)

CPC (source: EP US)
F04D 17/167 (2013.01 - EP); **F04D 29/281** (2013.01 - EP); **F04D 29/30** (2013.01 - EP); **F04D 29/661** (2013.01 - EP US);
F04D 29/669 (2013.01 - EP US); **F05D 2250/70** (2013.01 - EP)

Citation (search report)
See references of WO 2008001033A1

Cited by
CN114483604A

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AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IS IT LI LT LU LV MC MT NL PL PT RO SE SI SK TR

Designated extension state (EPC)
AL BA HR MK RS

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WO 2008001033 A1 20080103; CN 101484707 A 20090715; EP 2035712 A1 20090318; GB 0612993 D0 20060809; JP 2009541661 A 20091126;
US 2009185906 A1 20090723

DOCDB simple family (application)
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