

Title (en)
IMPELLER AND BLOWER

Title (de)
LAUFRAD UND GEBLÄSE

Title (fr)
TURBINE ET SOUFFLANTE

Publication
EP 3076022 A1 20161005 (EN)

Application
EP 16155019 A 20160210

Priority
JP 2015070177 A 20150330

Abstract (en)
An impeller(30,130) is fixed to a shaft(41) concentric with a center axis(J) extending in an up-down direction and is rotatable about the center axis(J) together with the shaft(41). The impeller(30,130) includes a boss portion (34) which is fixed to the shaft(41) and extends in an axial direction, an impeller body portion (31), a plurality of blade portions (32) arranged on an upper surface of the impeller body portion (31), and a rib portion (35, 135) arranged on a lower surface of the impeller body portion (31). The impeller body portion (31) extends downward from an upper end of the boss portion (34) while being widened in a radial direction, and is arranged to surround the boss portion (34) in a circumferential direction. When viewed in the axial direction, a front side end portion of the rib portion (35, 135) is curved toward a rotation direction back side as the rib portion (35, 135) extends from a radial inner side toward a radial outer side.

IPC 8 full level
F04D 25/06 (2006.01); **F04D 29/28** (2006.01); **F04D 29/32** (2006.01); **F04D 29/66** (2006.01)

CPC (source: CN EP US)
F04D 17/16 (2013.01 - US); **F04D 25/02** (2013.01 - US); **F04D 25/06** (2013.01 - EP US); **F04D 25/08** (2013.01 - CN); **F04D 29/053** (2013.01 - US); **F04D 29/263** (2013.01 - US); **F04D 29/281** (2013.01 - EP US); **F04D 29/30** (2013.01 - CN); **F04D 29/4233** (2013.01 - US); **F04D 29/667** (2013.01 - EP US)

Citation (search report)
• [XII] DE 102005049261 B3 20070329 - SIEMENS AG [DE]
• [XII] EP 2381112 A2 20111026 - BEHR GMBH & CO KG [DE]
• [XII] JP 2006207379 A 20060810 - CALSONIC KANSEI CORP
• [XII] US 2013230421 A1 20130905 - TERAMOTO TAKUYA [JP], et al

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 3076022 A1 20161005; CN 106015037 A 20161012; CN 106015037 B 20181113; CN 205478411 U 20160817; JP 2016191310 A 20161110; US 2016290352 A1 20161006

DOCDB simple family (application)
EP 16155019 A 20160210; CN 201610045735 A 20160122; CN 201620065010 U 20160122; JP 2015070177 A 20150330; US 201614990265 A 20160107