

Title (en)
RADIAL BLOWER

Title (de)
RADIALLÜFTER

Title (fr)
SOUFFLANTE RADIALE

Publication
EP 3607210 B1 20220504 (DE)

Application
EP 18714239 A 20180328

Priority
• DE 102017003431 A 20170407
• EP 2018057944 W 20180328

Abstract (en)
[origin: WO2018184946A1] The invention relates to a radial fan comprising: a fan impeller (2) which can rotate about an axis (1) and which comprises a base plate (29) and air blades (31) protruding from the base plate (29), the air blades (31) each having an upstream edge (32) at a first distance (r1) from the axis (1) and a downstream edge (33) at a second distance (r2) from the axis (1); and an end wall (15) which together with the base plate (29) delimits a flow channel (30) with which the air blades (31) engage. The cross-sectional area (A) of the flow channel (30) attains a maximum between the upstream (32) and the downstream edge (33) at a third distance (r3) from the axis (1). The difference between a fourth (r4) and a fifth distance (r5), at which distances the cross-sectional area (A) attains minima most closely adjacent to the maximum, is at least half the difference (r2-r1) between the first and the second distance.

IPC 8 full level
F04D 29/28 (2006.01); **F04D 29/16** (2006.01); **F04D 29/30** (2006.01); **F04D 29/44** (2006.01)

CPC (source: EP US)
F04D 29/162 (2013.01 - EP); **F04D 29/281** (2013.01 - EP US); **F04D 29/30** (2013.01 - EP); **F04D 29/4226** (2013.01 - US);
F04D 29/441 (2013.01 - EP); **F04D 29/30** (2013.01 - US); **F04D 29/4213** (2013.01 - US); **F05D 2250/711** (2013.01 - EP);
F05D 2250/712 (2013.01 - EP US)

Citation (examination)
DE 102016001484 A1 20170817 - EBM-PAPST ST GEORGEN GMBH & CO KG [DE]

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

DOCDB simple family (publication)
WO 2018184946 A1 20181011; CN 210738914 U 20200612; DE 102017003431 A1 20181011; DE 212018000127 U1 20190816;
EP 3607210 A1 20200212; EP 3607210 B1 20220504; ES 2919432 T3 20220726; HU E058983 T2 20220928; PL 3607210 T3 20220718;
PT 3607210 T 20220816; US 11105335 B2 20210831; US 2019376525 A1 20191212

DOCDB simple family (application)
EP 2018057944 W 20180328; CN 201890000578 U 20180328; DE 102017003431 A 20170407; DE 212018000127 U 20180328;
EP 18714239 A 20180328; ES 18714239 T 20180328; HU E18714239 A 20180328; PL 18714239 T 20180328; PT 18714239 T 20180328;
US 201816489366 A 20180328