Title (en)
Impeller for a radial fan and radial fan

Title (de)
Rad für ein Radialgebläse und Radialgebläse

Title (fr)
Turbine de ventilateur radial et ventilateur radial

Publication
EP 2058525 B1 20100428 (EN)

Application
EP 07425710 A 20071112

Priority
EP 07425710 A 20071112

Abstract (en)
[origin: EP2058525A1] An impeller (2) for a radial fan (1) adapted to rotate about a rotation axis (A) comprises a plurality of main blades (25) that are sequentially arranged about such rotation axis (A), and having radially innermost inlet ends (32) and radially outermost outlet ends (33). Each of the main blades (25) comprises a concave main blade first surface (26) and a convex main blade second surface (27) opposite the main blade first surface (26) and facing the main blade first surface of the successive main blade. The main blade first surfaces (26) define main blade arcs (PP) which comprise a first (PP1), a second (PP2), a third (PP3), and a fourth (PP4) main blade circle arcs that are radially arranged from the inside to the outside of the impeller (2), and having a first (R1), a second (R2), a third (R3), and a fourth (R4) main blade radii of curvature, respectively. The main blade radii of curvature (R1, R2, R3, R4) have ratios in the following ranges: R2/R1=1-1.1; R3/R1=1.1-1.2; R4/R1=1.2-1.5.

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

CPC (source: EP)
F04D 29/281 (2013.01); **F04D 29/30** (2013.01)

Cited by
CN108953236A; CN112032103A; US2016161133A1; US10082305B2; EP3273066A1; EP3366929A1; JP2015135118A; DE102022003842A1; WO2023124700A1

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