

Title (en)
Rotor for a radial fan

Title (de)
Lauftrad für einen Radiallüfter

Title (fr)
Roue pour un ventilateur radial

Publication
EP 0575763 B1 19970806 (DE)

Application
EP 93108392 A 19930525

Priority
DE 4220227 A 19920620

Abstract (en)
[origin: EP0575763A1] An impeller (10) for a radial-flow fan, especially for hand-held machine tools driven by electric motors or the like, is proposed which, in order to achieve an approximately three-dimensional curvature of the blade faces, is composed of a primary section (14), situated in the inflow region and having two-dimensionally curved primary blades (15), an intermediate section (16) adjoining thereto and having planar intermediate blades (17) and a secondary section (18), adjoining thereto in an approximately radial direction, situated in the outflow region, and likewise having two-dimensionally curved secondary blades (19). In this arrangement, the curvature axes of primary and secondary blades (15, 19) are aligned approximately orthogonally to one another. In order to achieve a considerable noise reduction without impairing the good performance characteristics of such radial-flow fans, the number of secondary blades (19) is chosen to be several times greater than the number of primary blades (15). <IMAGE>

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F04D 29/28

IPC 8 full level
F04D 29/28 (2006.01)

CPC (source: EP)
F04D 29/162 (2013.01); **F04D 29/281** (2013.01); **F04D 29/285** (2013.01); **F04D 29/30** (2013.01)

Cited by
CN108035891A; FR2811158A1; RU2615566C1; CN114483646A; FR2811157A1; CN108757559A; EP1760862A1; FR2890252A1; EP1079114A4; FR2811156A1; FR2724204A1; US2011194955A1; CN102146930A; US2014205476A1; US9033680B2; WO0235686A1; WO2004016952A1; US10818450B2

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