

Title (en)  
IMPELLER FOR AXIAL FANS

Title (de)  
LAUFRAD FÜR AXIALLÜFTER

Title (fr)  
ROTOR POUR VENTILATEUR AXIAL

Publication  
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Application  
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Abstract (en)  
[origin: WO2015197167A1] The invention relates to an impeller (10) for an axial fan, comprising an impeller body (12), which has an outer impeller jacket (14) and a carrying disk (16) having a hub (18) for connecting to a drive shaft (20) in a rotationally fixed manner, wherein a plurality of blades (22) directed radially outward is arranged on the carrying disk (16), which blades each have a blade root (24) and a blade airfoil (26). According to the invention, each blade root (24) has a fastening section (90), which is accommodated in a positive-locking manner between two fastening segments (28, 44) arranged oppositely on either side of the carrying disk (16), the two opposite fastening segments (28, 44) and the carrying disk (16) each have at least two through bores (58, 60) for accommodating a long sleeve (46, 50) and a short sleeve (48, 52), and the fastening section (90) can be firmly clamped between two opposite fastening segments (28, 44) by means of threaded bolts (30, 32, 34, 36) inserted through the sleeves (46, 48, 50, 52) and by means of nuts (40, 42), wherein each blade root (24) is guided in a cut-out (102) in the carrying disk (16). As a result of the design according to the invention, the impeller (10) can be produced economically, predominantly using individual parts having a comparatively simple geometric form.

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