

Title (en)  
IMPELLER FOR A FLUID PUMP AND A PUMP INCLUDING THE IMPELLER

Title (de)  
LAUFRAD FÜR EINE FLÜSSIGKEITSPUMPE UND PUMPE MIT DEM LAUFRAD

Title (fr)  
ROUE DE POMPE À FLUIDE ET POMPE COMPRENANT LADITE ROUE

Publication  
**EP 4130485 A1 20230208 (EN)**

Application  
**EP 21189275 A 20210803**

Priority  
EP 21189275 A 20210803

Abstract (en)  
An impeller (200) for a centrifugal pump (P) for fluid comprising: a lower pump plate (210) having at least one coupling section (212) configured to be coupled to a rotor shaft (RS) for driving the impeller (200) about its rotational axis (R); an upper pump plate (220) opposing the lower pump plate (210) and having a central opening (222) for providing an inlet for a fluid to be pumped; and a plurality of blades (230) arranged between the lower pump plate (210) and the upper pump plate (220), wherein the upper pump plate (220) and the lower pump plate (210) both have an outer circumference forming an outlet for the pumped fluid, wherein the fluid flows in a fluid flow direction (F) from the fluid inlet through a pump interior formed by the lower (210) and the upper pump plate (220), and out at the fluid outlet; wherein each of the blades (230) has a suction surface (231), a pressure surface (232) opposing the suction surface (231), side edges (233, 234, 235, 236) and a longitudinal axis extending at least substantially in fluid flow direction (F): a first longitudinal side edge (233) of each blade (230) being attached to the upper pump plate (220), a second longitudinal side edge (234) of each blade (230) opposing the first longitudinal side edge (233), and being attached to the lower pump plate (210), an inflow side edge (235) of each blade (230) being arranged at least substantially in the opposite direction of the fluid flow (F), and an outflow side edge (236) opposing the inflow side edge (235), and being arranged at least substantially in the direction of the fluid flow (F); wherein an angle formed between the outflow side edge (236) and the lower pump plate (210) is an acute angle.

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Citation (applicant)  
DE 102006023856 A1 20071122 - AWECO APPLIANCE SYS GMBH & CO [DE]

Citation (search report)  
• [XAI] JP S5148803 A 19760427 - TERADA SUSUMU  
• [XA] CN 111963477 A 20201120 - ANDRITZ CHINA LTD  
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• [A] SU 1605035 A1 19901107 - KASHIRIN ANATOLIY [SU], et al

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