

Title (en)
Blade for an axial pump.

Title (de)
Laufschaufel für eine Axialkreislumppe.

Title (fr)
Ailette pour pompe axiale.

Publication
EP 0237921 A2 19870923 (DE)

Application
EP 87103399 A 19870310

Priority
DE 3608229 A 19860312

Abstract (en)
[origin: US4775297A] The vane of the impeller in a high-speed or mixed-flow centrifugal pump for the conveying of liquids which contain high or low concentrations of strands or strips of vegetable, plastic or other material has a convex inlet edge whose curvature increases gradually in a direction radially outwardly from the axis of rotation at such a rate that the resultant of the centrifugal force and the resistance encountered by a strip or strand at a particular point of the inlet edge is invariably tangential to the respective point of the inlet edge. This ensures that the strips or strands do not overlie and circulate with the inlet edge but are entrained by the resultant force to become separated from the vane. The stagnation point of the vane in a region which is remote from the axis of rotation is disposed at the suction side of the vane; this also contributes to prevention of accumulation of strips or strands along the inlet edge.

Abstract (de)
Durch die Erfindung wird eine schnellaufende Axialkreislumppe zur Förderung von Flüssigkeiten ertüchtigt, die mit langfaserigen Beimengungen befrachtet sind. Dies geschieht durch eine im Anspruch 1 näher gezeichnete rückwärts gerichtete Krümmung der Laufschaufel (6) des Laufrades (9) der Axialkreislumppe.

IPC 1-7
F04D 29/18; F04D 3/00

IPC 8 full level
F04D 3/00 (2006.01); **F04D 29/18** (2006.01)

CPC (source: EP US)
F04D 29/181 (2013.01 - EP US)

Citation (applicant)
DE 500266 C 19300623 - KOESTER FRIEDRICH

Cited by
EP1806505A1; DE4314477A1; EP1811184A1; CN103644140A; US8251663B2; US8092189B2; WO2007079890A1

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DOCDB simple family (application)
EP 87103399 A 19870310; AT 87103399 T 19870310; CA 531684 A 19870311; DE 3608229 A 19860312; DK 122787 A 19870310; US 2431087 A 19870310