

Title (en)
SINGLE-BLADE IMPELLER FOR ROTARY PUMPS.

Title (de)
EINSCHAUFELRAD FÜR KREISELPUMPEN.

Title (fr)
ROUE A AUBE POUR POMPES CENTRIFUGES.

Publication
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Application
EP 91908572 A 19910502

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• DE 4015331 A 19900512
• EP 9100833 W 19910502

Abstract (en)
[origin: DE4015331A1] The invention relates to a single-blade impeller for rotary pumps for conveying fluids containing solids, especially waste water with long-fibred components, in which a channel (4) is formed between the front (1) and rear (2) cover plates of the single-blade impeller and the blade. In order to reduce considerably the cavitation which can adversely affect the running and conveying behaviour besides meeting the usual requirements concerning freedom from blockages and the lowest possible mechanical imbalance and hydrodynamic lift, according to the invention the blade angle (beta) measured on the blade (3) median line (11) from the inlet (5) to at least 90 DEG C of the angle of rotation is 0 DEG C or less, while the blade angle (beta) at the outlet (6) is positive.

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DE 4015331 A 19900512; AR 31951691 A 19910424; DE 59106053 T 19910502; EP 9100833 W 19910502; EP 91908572 A 19910502; US 94596692 A 19921112