

Title (en)  
Single-channel impeller for centrifugal pumps

Title (de)  
Einschaufelrad für Kreiselpumpen

Title (fr)  
Rouet à canal unique pour pompes centrifuges

Publication  
**EP 0640768 B1 19980128 (DE)**

Application  
**EP 94112033 A 19940802**

Priority  
DE 4328396 A 19930824

Abstract (en)  
[origin: EP0640768A1] The invention relates to a single-blade impeller for centrifugal pumps for the purpose of delivering solids-laden liquids, especially for delivering wastewater containing long-fibred constituents, the back discs (1, 2) of the single-blade impeller, and the blade (3) situated between these, together forming a passage (4). A reduction in the mass of the blade (3) and thus in the mass imbalance can be achieved, according to the invention, by the blade (3), apart from the leading edge of the blade having a blade base profile (9) which is thin over its entire extent by there being arranged, at the leading edge of the blade, a discharge-side boss (10) whose dimension corresponds at least to the thickness of the blade base profile (9), and by the radius of the blade head (11) corresponding to at least half the dimension formed by the blade base profile (9) and the boss (10). <IMAGE>

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IPC 8 full level  
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**F04D 29/225 (2013.01); F04D 29/242 (2013.01)**

Cited by  
CN106795892A; CN103671233A; CN104632695A; EP0750119A1; US5692880A; US10094222B2

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