

Title (en)  
SIDE CHANNEL CENTRIFUGAL PUMP

Title (de)  
SEITENKANALKREISELPUMPE

Title (fr)  
POMPE A CANAL LATERAL ET FLUX CIRCONFERENTIEL

Publication  
**EP 1029180 A1 20000823 (DE)**

Application  
**EP 97950152 A 19971110**

Priority  
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Abstract (en)  
[origin: WO9924719A1] The invention relates to a side channel centrifugal pump with a housing forming a side channel (1). The housing surface adjacent to the side channel forms a front face (13) adjoining the impeller. The transition edge (2, 3, 7) between the side channel (1) and the front face (13) is rounded in the areas where it deviates from the circumferential direction. In the front plane, the blades (16) of the impeller have a predetermined web width in the circumferential direction. According to the invention, the radius (15) of the transition edge (7) is greater than 0.25 (sec/m) times the product of web width x blade speed where the impeller blades (16) exit from the front face (13, 14) and overlap into the area of the side channel (1). This reduces cavitation tilting and noise.

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**F04D 5/00**

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