

Title (en)

Mixed flow pump

Title (de)

Schraubenzentrifugalradpumpe

Title (fr)

Pompe à écoulement mixte

Publication

**EP 1584820 B1 20060614 (DE)**

Application

**EP 04405214 A 20040407**

Priority

EP 04405214 A 20040407

Abstract (en)

[origin: EP1584820A1] Screw centrifuge wheel pump (1) comprises a guide blade (5) arranged in the region of an inlet opening (3c) and protruding into the inner chamber of the running wheel (2). The guide blade has an edge (5a) which protrudes into the inner chamber of the running wheel in the rotary direction (4a) increasing in the direction of the axis of rotation. The running wheel and the guide blade are structured so that a part of the solid mixture flows along an inlet blade edge (2a). An independent claim is also included for a process for conveying a liquid with solid additives. Preferred Features: The guide blade slides in the direction of the axis of rotation.

IPC 8 full level

**F04D 7/04** (2006.01); **F04D 1/04** (2006.01)

CPC (source: EP US)

**F04D 1/04** (2013.01 - EP US); **F04D 7/04** (2013.01 - EP US)

Cited by

EP2169234A2; CN112636910A; EP2908012A3; US10094384B2

Designated contracting state (EPC)

AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IT LI LU MC NL PL PT RO SE SI SK TR

DOCDB simple family (publication)

**EP 1584820 A1 20051012; EP 1584820 B1 20060614**; AT E330126 T1 20060715; CN 100419271 C 20080917; CN 1926338 A 20070307; DE 502004000769 D1 20060727; DK 1584820 T3 20060731; JP 2007532812 A 20071115; JP 5070039 B2 20121107; RU 2006139075 A 20080520; RU 2358159 C2 20090610; US 2007172345 A1 20070726; US 7510368 B2 20090331; WO 2005098237 A1 20051020

DOCDB simple family (application)

**EP 04405214 A 20040407**; AT 04405214 T 20040407; CH 2004000664 W 20041102; CN 200480042676 A 20041102; DE 502004000769 T 20040407; DK 04405214 T 20040407; JP 2007506630 A 20041102; RU 2006139075 A 20041102; US 58873604 A 20041102