

Title (en)

DEVICE FOR INFLUENCING THE FLOW OF A FLUID MEDIUM

Title (de)

VORRICHTUNG ZUR BEINFLUSSUNG DER STRÖMUNG EINES STRÖMENDEN MEDIUMS

Title (fr)

DISPOSITIF POUR INFLUENCER L'ÉCOULEMENT D'UN FLUIDE

Publication

EP 1203888 A4 20030122 (DE)

Application

EP 97933984 A 19970508

Priority

- UA 9700003 W 19970508
- UA 97031332 A 19970324

Abstract (en)

[origin: WO9842987A1] The aim of the disclosed device for influencing the flow of a fluid medium is to stimulate regulated hydrodynamic cavitation, for the purpose of heating the medium and/or dispersion into said medium of solid and liquid materials, for example. The device comprises an axisymmetric circulating channel for pumping over the main stream of the fluid medium, as well as an aperture in the channel wall used to admit agitating jets into the main stream and to stimulate hydrodynamic cavitation. In order to reduce hydraulic waste and noise while increasing reliability and yield, said aperture opens directly into the channel cavity, and its geometric axis intersects the geometric axis of the channel at an angle of between -60 DEG and +45 DEG . It is preferable to have several such apertures for admitting into the main stream agitating jets of a fluid of the same or of a different chemical composition.

IPC 1-7

F15D 1/02

IPC 8 full level

F15D 1/02 (2006.01); **B01F 5/00** (2006.01); **B01F 5/04** (2006.01); **F15D 1/06** (2006.01); **B01F 3/08** (2006.01); **B01F 3/12** (2006.01)

CPC (source: EP)

B01F 23/56 (2022.01); **B01F 25/27** (2022.01); **B01F 25/314** (2022.01); **F15D 1/02** (2013.01); **B01F 23/41** (2022.01); **B01F 2025/918** (2022.01)

Citation (search report)

- [X] US 5004484 A 19910402 - STIRLING THOMAS E [US], et al
- [X] DE 455957 C 19280213 - HEINRICH SILBERBERG
- [X] GB 713064 A 19540804 - HOLMES & CO LTD W C
- [A] SU 1315007 A1 19870607 - KI POLT I [SU]
- See references of WO 9842987A1

Cited by

GB2553002A; GB2553002B; US10337895B2; WO2006046200A1; WO2012052371A1

Designated contracting state (EPC)

AT BE DE DK ES FI FR GB GR IE IT NL PT SE

DOCDB simple family (publication)

WO 9842987 A1 19981001; AU 3715297 A 19981020; EP 1203888 A1 20020508; EP 1203888 A4 20030122; RU 2139454 C1 19991010; UA 25852 C2 19990226

DOCDB simple family (application)

UA 9700003 W 19970508; AU 3715297 A 19970508; EP 97933984 A 19970508; RU 98100026 A 19970508; UA 97031332 A 19970324