

Title (en)
NON-CHOKABLE PUMP

Title (de)
FREISTROMPUMPE

Title (fr)
POMPE NON COLMATABLE

Publication
EP 1583910 A1 20051012 (DE)

Application
EP 03782375 A 20031212

Priority
• DE 10301629 A 20030117
• EP 0314107 W 20031212

Abstract (en)
[origin: WO2004065796A1] The invention relates to a non-chokable pump for delivering liquids mixed with solid admixtures, comprising a casing (1), an uncovered impeller (2), and an open space between the impeller and the suction-side casing wall (10). The casing space situated radial to the impeller (2) is asymmetric when viewed in the meridian section, and the distance of the suction-side casing wall (10) from the impeller (2) continuously decreases in the diameter thereof, however a distance is formed between the impeller (2) and the suction-side casing wall (10) over the entire periphery. This distance is formed in such a manner that a solid object, which is contained in the liquid being pumped and which, in its largest dimension, corresponds the diameter of a predetermined ball, can pass through the non-chokable pump, whereby the suction-side casing space (10) continuously transitions into the wall (11) of the casing space situated radial to the impeller (2). This casing space, when viewed in the meridian section, is asymmetric in such a manner that the cross-sections of the areas situated radial to the contour of the impeller (2) are greater than the cross-sections of the areas situated in front of the first areas on the suction-side.

IPC 1-7
F04D 7/04; **F04D 29/22**; **F04D 29/42**

IPC 8 full level
F04D 7/04 (2006.01); **F04D 29/22** (2006.01); **F04D 29/42** (2006.01)

CPC (source: EP)
F04D 7/04 (2013.01); **F04D 29/2244** (2013.01); **F04D 29/426** (2013.01)

Citation (search report)
See references of WO 2004065796A1

Designated contracting state (EPC)
DE FR IE SE

DOCDB simple family (publication)
WO 2004065796 A1 20040805; **WO 2004065796 A8 20050804**; AR 042892 A1 20050706; AU 2003290021 A1 20040813; DE 10301629 A1 20040729; DE 10301629 B4 20130529; EP 1583910 A1 20051012; EP 1583910 B1 20160824

DOCDB simple family (application)
EP 0314107 W 20031212; AR P040100112 A 20040116; AU 2003290021 A 20031212; DE 10301629 A 20030117; EP 03782375 A 20031212