

Title (en)
Centrifugal pump with crushing device

Title (de)
Kreiselpumpe mit Zerkleinerungseinrichtung

Title (fr)
Pompe centrifuge avec un dispositif de broyage

Publication
EP 2113670 A3 20100728 (DE)

Application
EP 09004420 A 20090327

Priority
DE 102008021767 A 20080430

Abstract (en)
[origin: EP2113670A2] The pump (2) has a crushing device for crushing fibrous or lumpy additives in a pumped fluid. The crushing device is formed by a cutting head (6) and a cutting insert (7) that is fixedly arranged in a housing (3) of the pump. The cutting head is provided with axially running grooves, where blades (10) are arranged at a suction sided front side of the cutting head. An attachment (9) is arranged at the front side of the cutting head, and comprises a rotation symmetric base body. The blades are formed from the base body. One of the blades is designed as a profiled wing.

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

CPC (source: EP)
F04D 7/045 (2013.01); **F04D 29/2288** (2013.01)

Citation (search report)

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- [X] JP S5113403 A 19760202 - TOYO DENKI KOGYOSHO CO LTD
- [X] GB 1425821 A 19760218 - WALLWIN PUMPS LTD
- [A] DE 4128281 A1 19930304 - ABS PUMPEN AG [DE]
- [A] EP 1344944 A1 20030917 - KSB AG [DE]

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Designated contracting state (EPC)
AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO SE SI SK TR

Designated extension state (EPC)
AL BA RS

DOCDB simple family (publication)
EP 2113670 A2 20091104; EP 2113670 A3 20100728; EP 2113670 B1 20161207; CN 101571135 A 20091104; CN 101571135 B 20130529;
DE 102008021767 A1 20091105

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