

Title (en)
Pump impeller

Title (de)
Pumpenlaufrad

Title (fr)
Turbine de pompe

Publication
EP 2372162 A3 20121031 (EN)

Application
EP 11159937 A 20110328

Priority
TW 99109553 A 20100330

Abstract (en)
[origin: EP2372162A2] A pump impeller has two impeller bodies (10, 10A, 20, 20A) attached to each other. Each impeller body (10, 10A, 20, 20A) has an annular base wall (11, 11A, 21, 21A) and multiple partition protrusions (12, 12A, 22, 22A) separately formed on an inner surface of the base wall (11, 11A, 21, 21A). Multiple outlet channels (30, 30A) are respectively defined between the partition protrusions (12, 12A, 22, 22A). Each outlet channel (30, 30A) has a cross-sectional area decreasing from an inner end to an outer open end of the outlet channel (30, 30A). Thus, liquid flowing through the outlet channels (30, 30A) does not become turbulent and a working efficiency of a pump with the pump impeller is certainly improved.

IPC 8 full level
F04D 29/22 (2006.01)

CPC (source: EP US)
F04D 29/2222 (2013.01 - EP US); **F04D 29/2255** (2013.01 - EP US)

Citation (search report)

- [XY] US 538050 A 18950423
- [X] US 6210116 B1 20010403 - KUCZAJ JOHN E [US], et al
- [Y] US 3285187 A 19661115 - ANDERSON JR GORDON R
- [Y] US 2999628 A 19610912 - CROMBIE JOSEPH S
- [A] GB 1081163 A 19670831 - ULRICH MAX WILLI BARSKE, et al

Cited by
CN103075363A

Designated contracting state (EPC)
AL 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 RS SE SI SK SM TR

Designated extension state (EPC)
BA ME

DOCDB simple family (publication)
EP 2372162 A2 20111005; EP 2372162 A3 20121031; JP 3168366 U 20110609; TW 201139858 A 20111116; US 2011243732 A1 20111006

DOCDB simple family (application)
EP 11159937 A 20110328; JP 2011001705 U 20110329; TW 100110247 A 20110325; US 201113071880 A 20110325