

Title (en)
PUMP WITH AXIAL CONDUIT

Title (de)
PUMPE MIT AXIALER FÜHRUNG

Title (fr)
POMPE A CONDUIT AXIAL

Publication
EP 1372435 B1 20101208 (EN)

Application
EP 02761991 A 20020401

Priority

- US 0210073 W 20020401
- US 28025701 P 20010330
- US 28004001 P 20010330
- US 85970601 A 20010517
- US 0115834 W 20010517

Abstract (en)
[origin: WO02082955A1] The present invention is related to pumps and, more specifically, to pumps for use with inflatable devies. According to one embodiment of the present invention, a pump (10) is provided. The pump (10) includes an outer housing (20) and an inner housing (30) positioned within the outer housing (20) and defining a fluid conduit (40) between the inner housing (30) and the outer housing (20). The pump also includes a motor (50) positioned within the inner housing, a vane (70) occupying a majority of the fluid conduit (40), and an impeller (60) positioned within the fluid conduit and connected to the motor (50). According to one embodiment of the present invention, an inflatable device is provided. The inflatable device includes a substantially fluid impermeable bladder (120), a valve assembly (110), and a hand holdable pump (10) detachably connected to the valve assembly. A majority of the hand holdable pump and valve assembly are positioned within the bladder. In this embodiment, the average distance between an inner surface of the outer housing (20), and an outer surface of the inner housing (30) is less than about 25% of the average diameter of the outer housing.

IPC 8 full level
A47C 27/08 (2006.01); **F04D 3/00** (2006.01); **F04D 13/12** (2006.01)

CPC (source: EP)
A47C 27/082 (2013.01); **F04D 17/165** (2013.01); **F04D 25/06** (2013.01); **F04D 29/444** (2013.01)

Designated contracting state (EPC)
AT BE CH CY DE DK ES FI FR GB GR IE IT LI LU MC NL PT SE TR

DOCDB simple family (publication)
WO 02082955 A1 20021024; CA 2442553 A1 20021024; CA 2442553 C 20110920; EP 1372435 A1 20040102; EP 1372435 B1 20101208

DOCDB simple family (application)
US 0210073 W 20020401; CA 2442553 A 20020401; EP 02761991 A 20020401