

Title (en)
PUMP WITH AXIAL CONDUIT

Title (de)
PUMPE MIT AXIALER FÜHRUNG

Title (fr)
POMPE A CONDUIT AXIAL

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Abstract (en)
[origin: WO02082955A1] The present invention is related to pumps and, more specifically, to pumps for use with inflatable devices. 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.

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