

Title (en)

Adjustable inflation and deflation air pump

Title (de)

Einstellbare Luftpumpe zum Aufblasen oder Entleeren

Title (fr)

Pompe à air pour gonfler et dégonfler

Publication

**EP 1707821 B1 20080123 (EN)**

Application

**EP 06003490 A 20060221**

Priority

CN 200520055492 U 20050311

Abstract (en)

[origin: US2006204361A1] The present invention provides an adjustable inflate and deflate air pump consisting of: a pump frame, a pump body, a motor, blades, an air input hole, an air output hole, and a valve. A pump compartment of the present invention consists of an air compartment and a motor compartment. The air compartment is built up by the pump protective shield and the motor protective shield. The air compartment is connected to the air input hole. The motor compartment is built up by the motor protective shield and is connected with the air output hole at its bottom. On the upper part of the pump is a swing knob which is connected to the pump body. On the lower part of the pump is a curved surface. During its working process, the motor is cooled by constant airflows through the motor compartment during both inflation and deflation. Thus, the difficult problem of the motor overheating and being damaged during inflation and deflation has been solved perfectly. It is therefore a new pump with promising prospects.

IPC 8 full level

**F04D 25/08** (2006.01); **F04D 29/50** (2006.01); **F04D 29/58** (2006.01)

CPC (source: EP US)

**F04D 25/082** (2013.01 - EP US); **F04D 29/503** (2013.01 - EP US); **F04D 29/5806** (2013.01 - EP)

Cited by

CN103075357A; US8657565B2; WO2011133676A3

Designated contracting state (EPC)

AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IS IT LI LT LU LV MC NL PL PT RO SE SI SK TR

DOCDB simple family (publication)

**US 2006204361 A1 20060914**; AT E384878 T1 20080215; CN 2782996 Y 20060524; DE 602006000473 D1 20080313; DE 602006000473 T2 20090122; EP 1707821 A1 20061004; EP 1707821 B1 20080123

DOCDB simple family (application)

**US 16473605 A 20051202**; AT 06003490 T 20060221; CN 200520055492 U 20050311; DE 602006000473 T 20060221; EP 06003490 A 20060221