

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 A1 20061004 (EN)**

Application  
**EP 06003490 A 20060221**

Priority  
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Abstract (en)  
The present invention provides an adjustable inflation and deflation air pump consisting of: a pump frame (1), a pump body, a motor (3), blades (16), an air input hole (15), an air output hole (13), and a valve (9). A pump compartment of the present invention consists of an air compartment and a motor compartment. The air compartment is built up by a pump protective shield (6) and a motor protective shield (7). The air compartment is connected to the air input hole (15). The motor compartment is built up by a motor protective shield (7) and is connected to the air output hole (13) at its bottom. On the upper part of the pump is a swing knob (4) which is connected to the pump body. On the lower part of the pump is a curved surface (14). 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.

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

Citation (applicant)  
CN 2485493 Y 20020410 - HEYI PLASTIC RUBBER PRODUCTS C [CN]

Citation (search report)  
• [XY] US 2003099560 A1 20030529 - WANG CHENG-CHUNG [TW]  
• [Y] US 6428288 B1 20020806 - KING PETER J [AU]  
• [A] US 6733254 B1 20040511 - YEN STANLEY [TW]

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