

Title (en)

CENTRIFUGAL TURBINE FOR BREATHING-AID DEVICES

Title (de)

ZENTRIFUGALTURBINE FÜR ATEMHILFEVORRICHTUNGEN

Title (fr)

TURBINE CENTRIFUGE POUR DISPOSITIFS D'ASSISTANCE RESPIRATOIRE

Publication

**EP 1448896 A1 20040825 (FR)**

Application

**EP 02803822 A 20021108**

Priority

- FR 0203846 W 20021108
- FR 0115314 A 20011127

Abstract (en)

[origin: US2005036887A1] The invention concerns an electric turbin (1) comprising a turbine rotor (4, 7), a turbine stator (2, 3), an electric motor member (5, 6) for driving the rotor (4, 7) in rotation relative to the stator (2, 3), and having the following features: the turbine stator (2, 3) comprises a stator body defining a compression chamber (12); the turbine rotor (4, 7) includes a plurality of blades (26, 27) integral with a shaft (4) mounted coaxially rotating in the body (2, 3) of the turbine stator; the electric motor member (5, 6) comprises a toroidal motor stator (6) housed in a motor housing (16, 23) of the turbine stator (2, 3), at the center of the toroidal compression chamber (12) and a motor rotor (5) mounted on the shaft (4) of the turbine rotor, axially opposite the motor stator (6).

IPC 1-7

**F04D 25/06; F04D 29/30; F04D 17/06**

IPC 8 full level

**F04D 29/00** (2006.01); **A61M 16/00** (2006.01); **F04D 17/06** (2006.01); **F04D 17/10** (2006.01); **F04D 25/06** (2006.01); **F04D 25/08** (2006.01);  
**F04D 29/28** (2006.01); **F04D 29/30** (2006.01)

CPC (source: EP US)

**F04D 17/06** (2013.01 - EP US); **F04D 25/0606** (2013.01 - EP US); **F04D 29/281** (2013.01 - EP US); **F04D 29/30** (2013.01 - EP US)

Citation (search report)

See references of WO 03046385A1

Designated contracting state (EPC)

AT BE BG CH CY CZ DE DK EE ES FI FR GB GR IE IT LI LU MC NL PT SE SK TR

DOCDB simple family (publication)

**US 2005036887 A1 20050217; US 6960854 B2 20051101;** AT E354027 T1 20070315; CA 2468465 A1 20030605; CA 2468465 C 20110111;  
DE 60218205 D1 20070329; DE 60218205 T2 20071122; EP 1448896 A1 20040825; EP 1448896 B1 20070214; ES 2282517 T3 20071016;  
FR 2832770 A1 20030530; FR 2832770 B1 20040102; JP 2005510663 A 20050421; JP 4159992 B2 20081001; WO 03046385 A1 20030605

DOCDB simple family (application)

**US 49687604 A 20041022;** AT 02803822 T 20021108; CA 2468465 A 20021108; DE 60218205 T 20021108; EP 02803822 A 20021108;  
ES 02803822 T 20021108; FR 0115314 A 20011127; FR 0203846 W 20021108; JP 2003547796 A 20021108