



US009326901B2

(12) **United States Patent**
Conte

(10) **Patent No.:** **US 9,326,901 B2**
(45) **Date of Patent:** **May 3, 2016**

(54) **REMOVABLE MOTOR POWER DEVICE FOR WHEELCHAIRS OF DISABLED USERS**

(71) Applicant: **Giovanni Conte, Paderno Dugnano (MI) (IT)**

(72) Inventor: **Giovanni Conte, Paderno Dugnano (MI) (IT)**

(*) Notice: Subject to any disclaimer, the term of this patent is extended or adjusted under 35 U.S.C. 154(b) by 0 days.

(21) Appl. No.: **14/295,668**

(22) Filed: **Jun. 4, 2014**

(65) **Prior Publication Data**

US 2015/0351979 A1 Dec. 10, 2015

(30) **Foreign Application Priority Data**

Jun. 4, 2013 (IT) AN2013A0103

(51) **Int. Cl.**

A61G 5/04 (2013.01)

B62B 3/06 (2006.01)

A61G 5/10 (2006.01)

(52) **U.S. Cl.**

CPC **A61G 5/047** (2013.01); **B62B 3/0612** (2013.01); **A61G 2005/1051** (2013.01)

(58) **Field of Classification Search**

CPC **A61G 5/047**; **A61G 2005/1051**; **B62B 3/0612**

USPC **180/13, 12, 11**

See application file for complete search history.

(56) **References Cited**

U.S. PATENT DOCUMENTS

| | | | | |
|--------------|------|---------|----------------|-----------|
| 3,912,032 | A * | 10/1975 | Benz et al. | 180/13 |
| 5,207,286 | A * | 5/1993 | McKelvey | 180/13 |
| 5,494,126 | A * | 2/1996 | Meeker | 180/13 |
| 5,651,422 | A * | 7/1997 | Casali | 180/13 |
| 6,883,632 | B2 * | 4/2005 | McHardy et al. | 180/315 |
| 6,938,711 | B2 * | 9/2005 | Kime et al. | 180/11 |
| 7,216,728 | B2 * | 5/2007 | Huang et al. | 180/13 |
| 7,721,835 | B2 * | 5/2010 | Radtke | 180/205.5 |
| 7,976,049 | B2 * | 7/2011 | Chiu | 280/304.1 |
| 8,684,113 | B1 * | 4/2014 | Laconis | 180/11 |
| 2008/0115982 | A1 * | 5/2008 | Lin | 180/13 |

FOREIGN PATENT DOCUMENTS

| | | | |
|----|------------|----|---------|
| EP | 1927331 | A1 | 6/2008 |
| WO | 2009002543 | A1 | 12/2008 |

* cited by examiner

Primary Examiner — Anne Marie Boehler

Assistant Examiner — Marlon Arce

(74) *Attorney, Agent, or Firm* — Egbert Law Offices, PLLC

(57) **ABSTRACT**

A motor power device for wheelchairs of disabled users is removably mounted on the front of the wheelchair in order to be controlled by the user while sitting on the wheelchair. The device has a motor unit provided with an electrical motor, an intermediate frame disposed between the motor unit and the wheelchair, first inclination adjusting means between the motor unit and the intermediate frame and second inclination adjusting means between the intermediate frame and a bearing frame of the wheelchair. The intermediate frame and the motor unit are mounted and dismounted easily and rapidly.

12 Claims, 8 Drawing Sheets

