(11) **EP 1 898 035 A3**

(12)

EUROPEAN PATENT APPLICATION

(88) Date of publication A3: **04.03.2009 Bulletin 2009/10**

(51) Int Cl.: **E05F 15/10** (2006.01)

E05F 15/12 (2006.01)

(43) Date of publication A2: 12.03.2008 Bulletin 2008/11

(21) Application number: 07116116.0

(22) Date of filing: 11.09.2007

(84) Designated Contracting States:

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

Designated Extension States:

AL BA HR MK RS

(30) Priority: 11.09.2006 IL 17799506

(71) Applicant: Alex Original LTD 42504 Netanya (IL)

(72) Inventors:

 Hurwitz, Alexander, c/o Alex Original Ltd. Kiryat Sapir, PO Box 8521, Netanya 42504 (IL)

 Hurwitz, Michael, c/o Alex Original Ltd.
 Kiryat Sapir, PO Box 8521, Netanya 42504 (IL)

(74) Representative: Modiano, Micaela Nadia Modiano Josif Pisanty & Staub Ltd Thierschstrasse 11 80538 München (DE)

(54) Mechanism for opening and closing a vehicle door

(57) The present invention relates to motor vehicles having at least one hinged door.

The invention provides an electrically-operated mechanism for opening and closing a door or doors. The invention is particularly useful for operation of the two hinged doors normally found at the rear of a delivery van.

The invention achieves the above objects by providing a opening/closing electric mechanism for a hinged vehicle door, comprising a base plate (14) attachable to a fixed portion of the vehicle (16), a geared reversible electric motor (18) supported by said base plate (14). And a controller (22) being provided to effect all electrical opera-

tions. A short arm (24) attached to the output shaft (26) of the geared motor (20), and a long arm (30) having a first and a second extremity (32,34), revolvably attached to the short arm (24) at the first extremity (32). There is further provided an adapter plate (36) attachable to an inner surface of said door (12); and a pivot member revolvably attaching said second extremity (34) of said long arm (30) to said adapter plate (35); and means for activating/deactivating said motor (18) by means of said controller (22).



PARTIAL EUROPEAN SEARCH REPORT

Application Number

which under Rule 63 of the European Patent Convention EP 07 11 6116 shall be considered, for the purposes of subsequent proceedings, as the European search report

| | DOCUMENTS CONSIDI | | | | | |
|---|--|---|---------------------|-------------------------|--|--|
| Category | Citation of document with in of relevant passa | | opriate, | Relevant to claim | CLASSIFICATION OF THE APPLICATION (IPC) | |
| X Y | GB 2 414 038 A (MITSUI MINING & SM CO [JP]) 16 November 2005 (2005-11 * figures 3,11-13,19,20 * | | SMELTING -11-16) | 1 3,4,7, 10,12 | INV. E05F15/10 E05F15/12 | |
| A | * page 13, lines 7- * page 23, lines 10 * page 27, line 8 - * page 32, line 20 * page 38, line 10 | -12 * line 19 * - line 25 * | * * | 8,11,13 | | |
| x | WO 02/087912 A (LIT 7 November 2002 (20 * page 7, lines 16- | 02-11-07) | VE [CA]) | 1,2,5,6 | | |
| A | * page 9, lines 1-1 * page 9, line 25 - * page 20, lines 26 * page 24, lines 1- * page 27, lines 2- * page 29, lines 23 * figures 1,22,25 * | 2 * page 10, liv -30 * 3 * 6 * -32 * | ne 6 * | 8,11,13 | TECHNICAL FIELDS | |
| Y | DE 36 15 200 A1 (WU 12 November 1987 (1 * column 5, lines 2 | 987-11-12) | [DE]) | 7 | TECHNICAL FIELDS SEARCHED (IPC) E05F H02H G04G | |
| INCO | MPLETE SEARCH | | • | 1 | | |
| not compl be carried Claims se | oh Division considers that the present of the prese | a meaningful search into | | | | |
| Claims no | t searched : | | | | | |
| | or the limitation of the search: Sheet C | | | | | |
| | | | | | | |
| | The Hague | | nuary 2009 | Kle | mke, Beate | |
| CATEGORY OF CITED DOCUMENTS X: particularly relevant if taken alone Y: particularly relevant if combined with another document of the same category A: technological background O: non-written disclosure P: intermediate document | | T: theory or principle underlying the invention E: earlier patent document, but published on, or after the filing date D: document cited in the application L: document oited for other reasons | | nvention shed on, or | | |
| | | after the filing date D : document cited in the application | | | | |



PARTIAL EUROPEAN SEARCH REPORT

Application Number

EP 07 11 6116

| | DOCUMENTS CONSIDERED TO BE RELEVANT | CLASSIFICATION OF THE APPLICATION (IPC) | |
|----------|---|---|------------------------------------|
| Category | Citation of document with indication, where appropriate, of relevant passages | Relevant to claim | |
| Υ | US 2002/005650 A1 (ROGERS LLOYD WALKER [US] ET AL ROGERS JR LLOYD WALKER [US] ET AL) 17 January 2002 (2002-01-17) * paragraph [0030]; figure 7 * | 10,12 | |
| Υ | EP 1 205 829 A (ICE GMBH [CH]) 15 May 2002 (2002-05-15) * abstract * | 3 | |
| Υ | US 2004/139656 A1 (TAKEDA NOBUHIKO [JP] ET AL) 22 July 2004 (2004-07-22) * figures 2,5,7 * | 4 | |
| | * paragraphs [0027], [0034] * | | |
| | | | TECHNICAL FIELDS SEARCHED (IPC) |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |

3



INCOMPLETE SEARCH SHEET C

Application Number

EP 07 11 6116

| Claim(s) not searched: 9 | |
|--|--|
| Reason for the limitation of the search: | |
| Claim 9 does not contain any technical features. Indeed, claim 9 attempts to define the claimed subject matter exclusively by reference to the description and drawings. This renders the exact scope of the claim unclear. Consequently, a meaningful search over the claimed scope is impossible (Rule 63 EPC and Guidelines B-VIII, 3 iii). | |
| | |
| | |
| | |
| | |
| | |
| | |
| | |
| | |
| | |
| | |
| | |
| | |
| | |
| | |
| | |
| | |
| | |
| | |
| | |

ANNEX TO THE EUROPEAN SEARCH REPORT ON EUROPEAN PATENT APPLICATION NO.

EP 07 11 6116

This annex lists the patent family members relating to the patent documents cited in the above-mentioned European search report. The members are as contained in the European Patent Office EDP file on The European Patent Office is in no way liable for these particulars which are merely given for the purpose of information.

28-01-2009

 $\stackrel{
m O}{=}$ For more details about this annex : see Official Journal of the European Patent Office, No. 12/82