



(12) **EUROPEAN PATENT APPLICATION**

(88) Date of publication A3:  
**04.07.2001 Bulletin 2001/27**

(51) Int Cl.7: **E05D 15/06**, A47K 3/30,  
A47K 3/34

(43) Date of publication A2:  
**15.03.2000 Bulletin 2000/11**

(21) Application number: **99307143.0**

(22) Date of filing: **09.09.1999**

(84) Designated Contracting States:  
**AT BE CH CY DE DK ES FI FR GB GR IE IT LI LU**  
**MC NL PT SE**  
Designated Extension States:  
**AL LT LV MK RO SI**

(72) Inventor: **Jang, Du-Suk**  
**Yeonsu-ku, Inchon (KR)**

(30) Priority: **09.09.1998 KR 9837129**  
**27.02.1999 KR 9906702**

(74) Representative: **Findlay, Alice Rosemary et al**  
**Lloyd Wise, Tregear & Co.,**  
**Commonwealth House,**  
**1-19 New Oxford Street**  
**London WC1A 1LW (GB)**

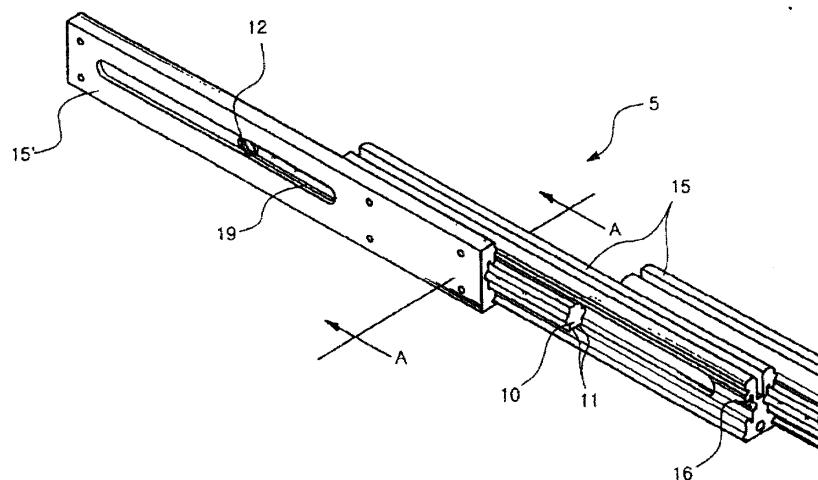
(71) Applicant: **Jang, Du-Suk**  
**Yeonsu-ku, Inchon (KR)**

(54) **Sliding door**

(57) A sliding door is disclosed. The sliding door has one or more door panels (2, 3, 4), and a sliding means being mounted to the door panels and allowing the door panels to slide. In the sliding means, a bracket (15') has a longitudinal stopper guide slot (19) and a guide groove (10). One or more sliding bars (15) individually have a longitudinal stopper guide slot (19) and a guide groove (16). One or more sliders (10) are inserted into the guide

grooves, thus sliding within the guide grooves. Each slider has stoppers (12) disposed within the stopper guide slots. With such a sliding door configuration, an entrance through the opened sliding door is widened relative to known sliding doors, mass production of the door parts and installation of a sliding door becomes relatively easy, and walking and carrying baggage beyond the door are not impeded by door frames.

**Fig 3**





European Patent  
Office

# EUROPEAN SEARCH REPORT

Application Number  
EP 99 30 7143

| DOCUMENTS CONSIDERED TO BE RELEVANT  |   |                                  |  |
|--|---|----------------------------------|--|
| Category   | Citation of document with indication, where appropriate, of relevant passages   | Relevant to claim                | CLASSIFICATION OF THE APPLICATION (Int.Cl.7) |
| X  | DE 38 11 694 A (ARTWEGER GES M B H)<br>19 October 1989 (1989-10-19)   | 1,8                              | E05D15/06<br>A47K3/30                        |
| Y  | * column 1, line 37 - column 2, line 7;<br>figures 1-6 *  | 2-7,9                            | A47K3/34                                     |
|  | ---   |                                  |  |
| Y  | DE 29 11 967 A (HUEPPE DUSCHA GMBH)<br>9 October 1980 (1980-10-09)<br>* page 12, paragraph 2 *<br>* page 13, paragraph 1 *<br>* page 15, paragraph 2; figures 3-5,7,8 * | 2-4,6,7,<br>9                    |  |
|  | ---   |                                  |  |
| Y  | GB 1 521 830 A (GUENTER & CO ONI METALL)<br>16 August 1978 (1978-08-16)<br>* page 2, line 86 - line 89; figures 2,3 *   | 5                                |  |
|  | ---   |                                  |  |
| D,A  | US 4 635 699 A (KAUFFMAN JAMES C ET AL)<br>13 January 1987 (1987-01-13)<br>* column 4, line 20 - line 54; figures 1-3 *   | 1                                |  |
|  | -----   |                                  |  |
|  |   |                                  | TECHNICAL FIELDS<br>SEARCHED (Int.Cl.7)      |
|  |   |                                  | A47K<br>E05D                                 |
| The present search report has been drawn up for all claims   |   |                                  |  |
| Place of search  |   | Date of completion of the search | Examiner                                     |
| THE HAGUE  |   | 11 May 2001                      | Guillaume, G                                 |
| <p>CATEGORY OF CITED DOCUMENTS</p> <p>X : particularly relevant if taken alone<br/>Y : particularly relevant if combined with another document of the same category<br/>A : technological background<br/>O : non-written disclosure<br/>P : intermediate document</p> <p>T : theory or principle underlying the invention<br/>E : earlier patent document, but published on, or after the filing date<br/>D : document cited in the application<br/>L : document cited for other reasons</p> <p>&amp; : member of the same patent family, corresponding document</p> |   |                                  |  |

EPO FORM 1503 03.82 (P04C01)

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

EP 99 30 7143

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.

11-05-2001

| Patent document<br>cited in search report |   | Publication<br>date | Patent family<br>member(s) | Publication<br>date |
|---|---|---------------------|----------------------------|---------------------|
| DE 3811694                                | A | 19-10-1989          | NONE                       |                     |
| DE 2911967                                | A | 09-10-1980          | NONE                       |                     |
| GB 1521830                                | A | 16-08-1978          | DE 2555755 A               | 23-06-1977          |
|   |   |                     | AT 365732 B                | 10-02-1982          |
|   |   |                     | AT 862376 A                | 15-06-1981          |
|   |   |                     | BE 848925 A                | 16-03-1977          |
|   |   |                     | CH 612724 A                | 15-08-1979          |
|   |   |                     | FR 2334331 A               | 08-07-1977          |
|   |   |                     | IT 1069920 B               | 25-03-1985          |
|   |   |                     | SE 421442 B                | 21-12-1981          |
|   |   |                     | SE 7613958 A               | 12-06-1977          |
| US 4635699                                | A | 13-01-1987          | NONE                       |                     |