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kind of national protection available): AE, AG, AL, AM,  
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DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN,  
HR, HU, ID, IL, IN, IR, IS, JP, KE, KG, KH, KN, KP, KR,  
KW, KZ, LA, LC, LK, LR, LS, LU, LY, MA, MD, ME, MG,  
MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM,  
PA, PE, PG, PH, PL, PT, QA, RO, RS, RU, RW, SA, SC,

(54) Title: SYSTEM FOR DRAWING A WHEELED PASSENGER SUPPORT INTO A VEHICLE

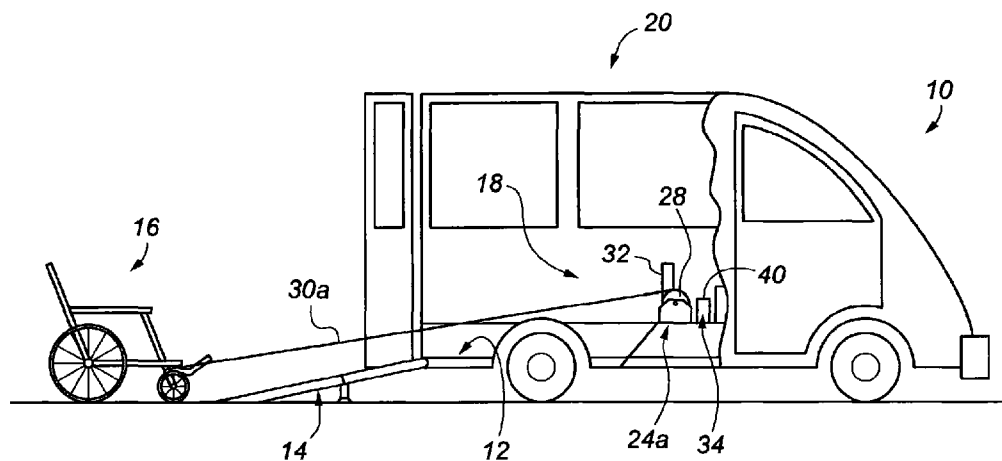


Fig. 2

(57) Abstract: There is disclosed a system (18) for drawing a wheeled passenger support (16) into a vehicle (10) and selectively restraining the passenger support against movement. The wheeled passenger support may take the form of a wheelchair, wheeled bed or stretcher. One disclosed system comprises: first and second winches (24a/b), each winch comprising a spool (28a/b), a flexible elongate winch element (30a/b) which can be wound on to the spool and which is adapted to be coupled to the passenger support, and a motor (32a/b) for driving the spool to reel in the winch element; and a control system (34a/b) for controlling operation of the first and second winches. The first and second winches are adapted to be mounted within the vehicle and are operable to draw the passenger support into the vehicle, via the flexible elongate winch elements. The control system comprises a first sensor (36a/b) for monitoring rotation of the first winch spool, a second sensor (38a/b) for monitoring rotation of the second winch spool, and a controller (40a/b) which is arranged



SD, SE, SG, SK, SL, SM, ST, SV, SY, TH, TJ, TM, TN, TR,  
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**INTERNATIONAL SEARCH REPORT**

International application No  
PCT/GB2017/051335

<b>A. CLASSIFICATION OF SUBJECT MATTER</b> INV. B66D1/18 A61G3/06 A61G3/08 B60P1/43 B60P1/54 B66D1/48 B66D1/36 B66D5/06				
ADD. According to International Patent Classification (IPC) or to both national classification and IPC				
<b>B. FIELDS SEARCHED</b> Minimum documentation searched (classification system followed by classification symbols) B66D A61G B60P				
Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched				
Electronic data base consulted during the international search (name of data base and, where practicable, search terms used) EPO-Internal, WPI Data				
<b>C. DOCUMENTS CONSIDERED TO BE RELEVANT</b>				
Category*	Citation of document, with indication, where appropriate, of the relevant passages			Relevant to claim No.
X	JP 2006 280400 A (AUTECH JAPAN INC) 19 October 2006 (2006-10-19) abstract paragraph [0029] - paragraph [0030] figures 1,3,5-7,9,11,12 paragraphs [0008], [0010] paragraph [0027] - paragraph [0028] -----			1-8,13, 30 9-12, 14-17
Y				
X	EP 2 949 303 A1 (HONDA MOTOR CO LTD [JP]) 2 December 2015 (2015-12-02) abstract paragraph [0028] paragraph [0059] paragraph [0081] figures 1,5,6,12-16 ----- -/--			1-8,30
<input checked="" type="checkbox"/> Further documents are listed in the continuation of Box C. <input checked="" type="checkbox"/> See patent family annex.				
* Special categories of cited documents : "A" document defining the general state of the art which is not considered to be of particular relevance "E" earlier application or patent but published on or after the international filing date "L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified) "O" document referring to an oral disclosure, use, exhibition or other means "P" document published prior to the international filing date but later than the priority date claimed "T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention "X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone "Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art "&" document member of the same patent family				
Date of the actual completion of the international search 8 September 2017			Date of mailing of the international search report 08/11/2017	
Name and mailing address of the ISA/ European Patent Office, P.B. 5818 Patentlaan 2 NL - 2280 HV Rijswijk Tel. (+31-70) 340-2040, Fax: (+31-70) 340-3016			Authorized officer Cabral Matos, A	

# INTERNATIONAL SEARCH REPORT

International application No.  
PCT/GB2017/051335

## Box No. II Observations where certain claims were found unsearchable (Continuation of item 2 of first sheet)

This international search report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:

1.  Claims Nos.:  
because they relate to subject matter not required to be searched by this Authority, namely:
  
2.  Claims Nos.:  
because they relate to parts of the international application that do not comply with the prescribed requirements to such an extent that no meaningful international search can be carried out, specifically:
  
3.  Claims Nos.:  
because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a).

## Box No. III Observations where unity of invention is lacking (Continuation of item 3 of first sheet)

This International Searching Authority found multiple inventions in this international application, as follows:

see additional sheet

1.  As all required additional search fees were timely paid by the applicant, this international search report covers all searchable claims.
  
2.  As all searchable claims could be searched without effort justifying an additional fees, this Authority did not invite payment of additional fees.
  
3.  As only some of the required additional search fees were timely paid by the applicant, this international search report covers only those claims for which fees were paid, specifically claims Nos.:
  
4.  No required additional search fees were timely paid by the applicant. Consequently, this international search report is restricted to the invention first mentioned in the claims; it is covered by claims Nos.:

1-17(completely); 30(partially)

### Remark on Protest

- The additional search fees were accompanied by the applicant's protest and, where applicable, the payment of a protest fee.
- The additional search fees were accompanied by the applicant's protest but the applicable protest fee was not paid within the time limit specified in the invitation.
- No protest accompanied the payment of additional search fees.

## INTERNATIONAL SEARCH REPORT

International application No  
PCT/GB2017/051335

C(Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT		
Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	US 2005/072965 A1 (SANDERS MARK E [US] ET AL) 7 April 2005 (2005-04-07) abstract paragraph [0024] paragraph [0060] - paragraph [0061] figures 1,3,6,7	9-12, 14-17
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A	----- EP 2 564 824 A2 (FOCACCIA ATTREZZA VEICOLI DI FOCACCIA RICCARDO [IT]) 6 March 2013 (2013-03-06) abstract figure 1	1-17
A	----- US 2015/284223 A1 (HALL DAVID R [US] ET AL) 8 October 2015 (2015-10-08) paragraph [0101] - paragraph [0102] paragraph [0125] - paragraph [0127] figures 31,32,34,35 -----	1-17

# INTERNATIONAL SEARCH REPORT

Information on patent family members

International application No

PCT/GB2017/051335

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			US 2016236916 A1	18-08-2016
			US 2016236918 A1	18-08-2016
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**FURTHER INFORMATION CONTINUED FROM PCT/ISA/ 210**

This International Searching Authority found multiple (groups of) inventions in this international application, as follows:

1. claims: 1-17(completely); 30(partially)

A system for drawing a wheeled passenger support into a vehicle and selectively restraining the passenger support against movement, comprising particular sensor arrangements to monitor the rotation of the winch spools.

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2. claims: 18(completely); 30(partially)

A system for drawing a wheeled passenger support into a vehicle and selectively restraining the passenger support against movement, comprising winch mountings to avoid twisting of the winch belts when reeling-in.

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3. claims: 19-29(completely); 30(partially)

A system for drawing a wheeled passenger support into a vehicle and selectively restraining the passenger support against movement, comprising locking arrangements for selectively locking the winch spools against rotation.

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