



(12) **EUROPEAN PATENT APPLICATION**

(88) Date of publication A3:
03.07.2024 Bulletin 2024/27

(51) International Patent Classification (IPC):
A61G 3/08 (2006.01)

(43) Date of publication A2:
26.06.2024 Bulletin 2024/26

(52) Cooperative Patent Classification (CPC):
A61G 3/0808

(21) Application number: **24174639.5**

(22) Date of filing: **24.12.2020**

(84) Designated Contracting States:
**AL AT BE BG CH CY CZ DE DK EE ES FI FR GB
GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO
PL PT RO RS SE SI SK SM TR**

(30) Priority: **19.11.2020 US 202016952464**

(62) Document number(s) of the earlier application(s) in
accordance with Art. 76 EPC:
20217237.5 / 4 000 572

(71) Applicant: **The Braun Corporation
Winamac, Indiana 46996 (US)**

(72) Inventors:
• **WOJDYLA, Adam D.
Winamac, 46996 (US)**
• **PUGH, Michael R
Winamac, 46996 (US)**
• **BADALLO, Carlos
Winamac, 46996 (US)**

(74) Representative: **HGF
HGF Limited
1 City Walk
Leeds LS11 9DX (GB)**

(54) **WHEELCHAIR DOCKING SYSTEM AND METHOD THEREOF**

(57) A wheelchair docking system including a frame having an upper portion and a lower portion, the upper portion being movable relative to the lower portion between a lowered position and a raised position. A coupler mechanism engages a wheelchair during a docking operation. The system also includes a first latching mechanism being movable between a retracted position and a latching position such that the first latching mechanism

is spaced from the coupler mechanism. A second latching mechanism moves the upper portion of the frame between its lowered position and raised position. The first latching mechanism is partially retracted by a wheelchair during the docking operation, and the first latching mechanism is biased to its latching position when the coupler mechanism engages the wheelchair.

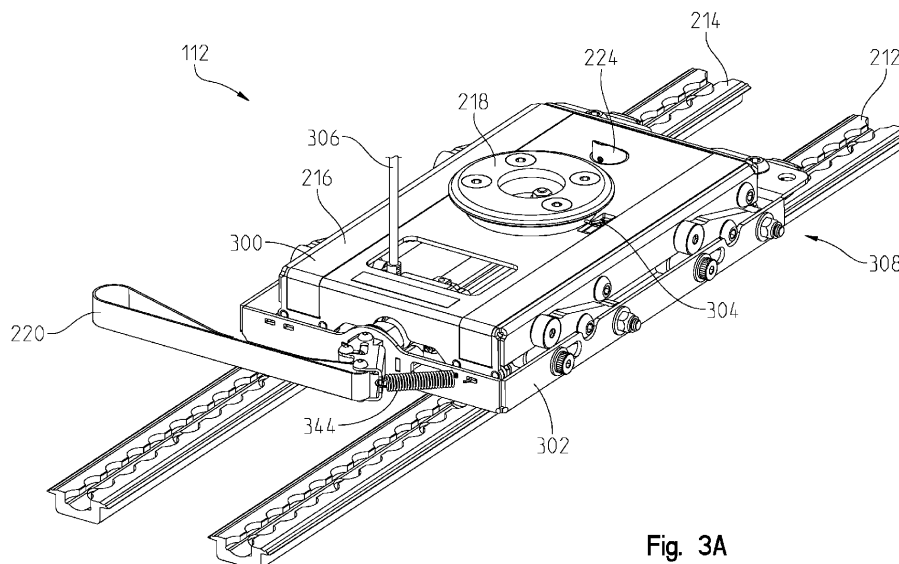


Fig. 3A



EUROPEAN SEARCH REPORT

Application Number

EP 24 17 4639

5

10

15

20

25

30

35

40

45

50

55

1

EPO FORM 1503 03.82 (P04C01)

DOCUMENTS CONSIDERED TO BE RELEVANT			
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (IPC)
X	US 2002/064433 A1 (CONSTANTIN BRUCE J [US]) 30 May 2002 (2002-05-30)	1-4,7-15	INV. A61G3/08
Y	* paragraph [0022]; figures * -----	5,6	
X	US 2011/011907 A1 (PANZARELLA THOMAS A [US] ET AL) 20 January 2011 (2011-01-20)	1	
A	* paragraph [0147]; claims; figures * -----	2-15	
Y	WO 2018/184884 A1 (MASKF DAHL ENGINEERING V/CLAUS DAHL PEDERSEN [DK]) 11 October 2018 (2018-10-11)	1,5,6	
A	* page 7, line 21 - page 11, line 17; figures * -----	2-4,7-15	
Y	US 2009/214314 A1 (GIRARDIN JEAN-MARC [US] ET AL) 27 August 2009 (2009-08-27)	1	TECHNICAL FIELDS SEARCHED (IPC) A61G
A	* paragraph [0027] - paragraph [0029]; figures * -----	2-15	
A	US 5 489 170 A (INOUE HIROAKI [JP] ET AL) 6 February 1996 (1996-02-06)	1-15	
A	* abstract; figures * -----	1-15	
A	US 2020/155386 A1 (KUMAR ANJANI [US]) 21 May 2020 (2020-05-21)	1-15	
	* abstract; figures * -----		
The present search report has been drawn up for all claims			
Place of search The Hague		Date of completion of the search 22 May 2024	Examiner Kousouretas, Ioannis
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 cited for other reasons & : member of the same patent family, corresponding document			

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

EP 24 17 4639

5

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.

22-05-2024

10

15

20

25

30

35

40

45

50

55

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
US 2002064433 A1	30-05-2002	AU 1790302 A	11-06-2002
		US 2002064433 A1	30-05-2002
		US 2003012617 A1	16-01-2003
		WO 0243639 A2	06-06-2002
US 2011011907 A1	20-01-2011	CA 2695140 A1	15-01-2009
		EP 2176090 A1	21-04-2010
		US 2011011907 A1	20-01-2011
		WO 2009009726 A1	15-01-2009
WO 2018184884 A1	11-10-2018	AU 2018248792 A1	21-11-2019
		DK 201700233 A1	14-12-2018
		EP 3606489 A1	12-02-2020
		ES 2950441 T3	10-10-2023
		PL 3606489 T3	25-09-2023
		US 2021100701 A1	08-04-2021
		WO 2018184884 A1	11-10-2018
US 2009214314 A1	27-08-2009	US 2005214090 A1	29-09-2005
		US 2009214314 A1	27-08-2009
		WO 2005102775 A1	03-11-2005
US 5489170 A	06-02-1996	DE 4343060 A1	23-06-1994
		FR 2699071 A1	17-06-1994
		JP 3265660 B2	11-03-2002
		JP H06181950 A	05-07-1994
		US 5489170 A	06-02-1996
US 2020155386 A1	21-05-2020	US 2020155386 A1	21-05-2020
		US 2023201051 A1	29-06-2023
		WO 2020102827 A1	22-05-2020