### (19) World Intellectual Property Organization

International Bureau





(43) International Publication Date 22 November 2007 (22.11.2007)

# (10) International Publication Number WO 2007/133552 A3

- (51) International Patent Classification: A61G 7/057 (2006.01)
- (21) International Application Number:

PCT/US2007/011122

- (22) International Filing Date: 8 May 2007 (08.05.2007)
- (25) Filing Language: English
- English (26) Publication Language:
- (30) Priority Data:

60/799,435

9 May 2006 (09.05.2006) US

- (71) Applicant (for all designated States except US): HILL-ROM SERVICES, INC. [US/US]; 300 Delaware Avenue, Suite 530, Wilmington, DE 19801 (US).
- (72) Inventors; and
- (75) Inventors/Applicants (for US only): RICHARDS, Sandy, Mark [US/US]; 319 Main Street, Pershing, IN 47370 (US). O'KEEFE, Christopher, R. [US/US]; 318 Coonhunters Road, Batesville, IN 47006 (US). MEYER, Eric, R. [US/US]; 4185 County Line Road, Greensburg, IN 47240 (US). WILSON, Bradley, T. [US/US]; 236 Winding Way, Batesville, IN 47006 (US).
- (74) Agent: CONARD, Richard, D.; Barnes & Thornburg Llp, 11 South Meridian Street, Indianapolis, IN 46204 (US).

- (81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BH, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LY, MA, MD, ME, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, SV, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW.
- (84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, MT, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

#### **Declarations under Rule 4.17:**

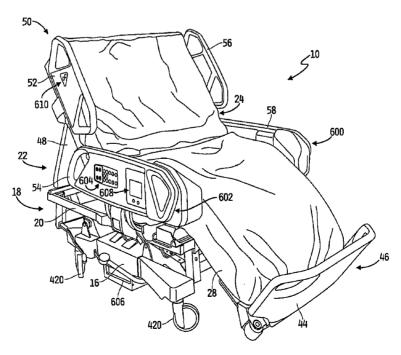
- as to the applicant's entitlement to claim the priority of the earlier application (Rule 4.17(iii))
- of inventorship (Rule 4.17(iv))

#### **Published:**

with international search report

[Continued on next page]

### (54) Title: PULMONARY MATTRESS



(57) Abstract: A patient-support apparatus (10) includes a mattress assembly (14) supported on a frame (12), the mattress assembly (14) including a coverlet (28) configured to provide low-airloss therapy to a patient supported on the patient-support apparatus (10). The patient-support apparatus (10) is articulable to a number of positions and includes a control network (410) which is responsive to movement of portions of the frame (12) to alter operational parameters of the frame (12) and mattress assembly (14).



#### 

- before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments
- (88) Date of publication of the international search report: 6 November 2008

# INTERNATIONAL SEARCH REPORT

International application No.

PCT/US07/11122

A. CLASSIFICATION OF SUBJECT MATTER IPC: A61G 7/057( 2006.01)					
USPC: 5/600,607,609,710,713 According to International Patent Classification (IPC) or to both national classification and IPC					
B. FIELDS SEARCHED					
Minimum documentation searched (classification system followed by classification symbols) U.S.: 5/600,607,609,710,713					
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) EAST					
C. DOC	UMENTS CONSIDERED TO BE RELEVANT				
Category *	Citation of document, with indication, where appropriate, of the relevant passages			Relevant to claim No.	
X	US 6,584,628 B1 (KUMMER et al) 01 July 2003 (01.07.2003), Whole Document			1-3, 5, 13, 14	
Y .				4, 6-12, 15-19	
Y	"ALAMO-Alternating Low Airloss Mattress Overlay," National Patient Care Systems, Inc., advertising literature, two pages			20-22, 27, 29, 30	
Y	US 2001/0033925 A1 (TRAPP et al) 25 October 2001 (25.10.2001), Whole Document			23-26, 28	
Further documents are listed in the continuation of Box C.  See patent family annex.					
"A" document	pecial categories of cited documents:  defining the general state of the art which is not considered to be of	"T"	later document published after the inter- date and not in conflict with the applica principle or theory underlying the inven	tion but cited to understand the	
"E" earlier application or patent 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)		"X"	document of particular relevance; the cl considered novel or cannot be consider- when the document is taken alone	isidered to involve an inventive step	
		"Y"			
"O" document referring to an oral disclosure, use, exhibition or other means			obvious to a person skilled in the art		
"P" document published prior to the international filing date but later than the priority date claimed		"&" document member of the same patent family			
Date of the actual completion of the international search		Date of mailing of the international search report			
08 August 2008 (08.08.2008)			2 SEP 2008		
Name and mailing address of the ISA/US  Mail Stop PCT, Attn: ISA/US					
Commissioner for Patents		Patricia L Engle			
P.O. Box 1450 Alexandria, Virginia 22313-1450 Facsimile No. (571) 273-3201		Telephon	e No. 571-272-5894		

Form PCT/ISA/210 (second sheet) (April 2007)