

(19) World Intellectual Property Organization
International Bureau



(43) International Publication Date
18 March 2004 (18.03.2004)

PCT

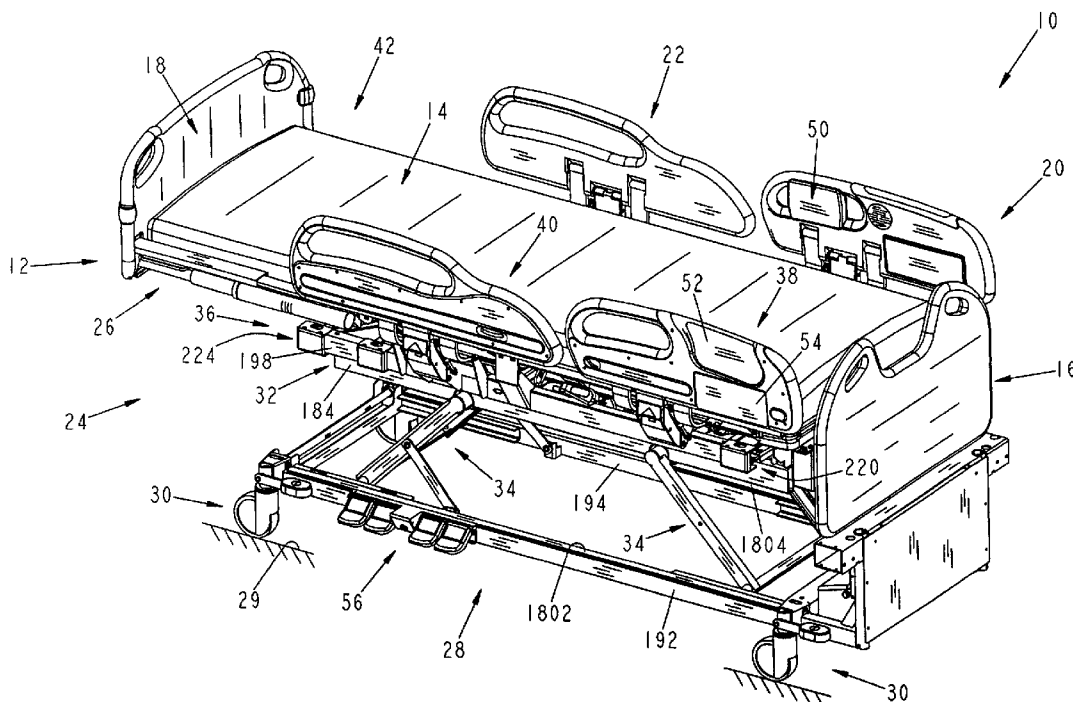
(10) International Publication Number
WO 2004/021952 A3

- (51) International Patent Classification:
A61G 7/012 (2006.01)
- (21) International Application Number:
PCT/US2003/028018
- (22) International Filing Date:
8 September 2003 (08.09.2003)
- (25) Filing Language: English
- (26) Publication Language: English
- (30) Priority Data:
60/408,698 6 September 2002 (06.09.2002) US
60/409,748 11 September 2002 (11.09.2002) US
60/489,171 22 July 2003 (22.07.2003) US
60/490,467 28 July 2003 (28.07.2003) US
- (71) Applicant: HILL-ROM SERVICES, INC. [US/US]; 300 Delaware Avenue, Suite 530, Wilmington, DE 19801 (US).
- (72) Inventors: CHAMBERS, Kenith, W.; 1358 Tekulve Road, Batesville, IN 47006 (US). GOODWIN, Brent; 613 West Pearl Street, Batesville, IN 47006 (US). LUBBERS, David, P.; 6233 Elmhill Court, Cincinnati, OH 45248 (US). MURNYACK, Roberta, M.; 11651 Norbourne Drive # 2013, Cincinnati, OH 45240 (US). OSBORNE, Eugene, E.; 2257 Kyle Drive, Hebron, KY 41048 (US). SKINNER, Andrew, F.; 204 North Vine Street, Batesville, IN 47007 (US). STOLPMANN, James, R.; 1432 Fairway

Drive, Lawrenceburg, IN 47025 (US). RICHTER, Terry, L.; 4883 Springdale Road, Cincinnati, OH 45251 (US). MENKEDICK, Douglas, J.; 4617 North Dearborn Road, Guilford, IN 47022 (US). WELLING, Jeffrey, R.; 27 Lynn Haven Drive, Batesville, IN 47006 (US). ALBERSMEYER, David, A.; 377 State Road 129 South, Batesville, IN 47006 (US). BATA, Nicholas, C.; 327 Northside Drive, Batesville, IN 47006 (US). DIXON, Steve, A.; 9553 Old Woods Drive, Hamilton, OH 45011 (US). FIGEL, Gregory, J.; 9910 Country Hill Court, Mason, OH 45040 (US). FINDLAY, James, K.; 7497 Timberland Drive, Fishers, IN 46038 (US). HOFFMAN, Brian, J.; 20127 Lakeview Drive, Lawrenceburg, IN 47025 (US). HORNBAACH, David, W.; 12161 County Line Road, Brookville, IN 47012 (US). KRAMER, Kenneth, L.; 712 N. County Road 850 East, Greensburg, IN 47240 (US). PHILBECK, Roger, S.; 25236 MT. Pleasant Road, Lawrenceburg, IN 47025 (US). SCHWARTZ, Steven, J.; 2945 Lisher, Cincinnati, OH 45211 (US). SHENK, Joshua, W.; 120 White Oak Drive, Batesville, IN 47006 (US). SUTTMAN, Glenn, C.; 27033 Suttman Road, Batesville, IN 47006 (US). VANDERPOHL, Irvin, J., III; 2471 East County Road 575 South, Greensburg, IN 47240 (US). WEIL, Paul, R.; 1789 Walnut Grove, Lawrenceburg, IN 47025 (US). WILKER, Jack, Jr.; 1418 Aaron Drive, Shelbyville, IN 46176 (US). ZERHUSEN,

[Continued on next page]

(54) Title: HOSPITAL BED



(57) Abstract: A patient support (10) including a frame (12) and a mattress (14) supported by the frame (12). The frame (12) includes a deck support (24) and a deck (26) supporting the mattress (14).

WO 2004/021952 A3



Robert, M.; 10186 Owl Creek Road, Cincinnati, OH 45252 (US). **BHAI, Aziz, Ali;** 801 West Pearl Street, Batesville, IN 47006 (US). **RIGGS, Tom;** P.O. Box 122, Milan, IN 47031 (US). **KNUE, Matthew, R.;** 14633 State Road 350, Lot 7, Morres Hill, IN 47032 (US). **SCHEELE, Cami, S.;** 404 Pheasant Run Drive, Batesville, IN 47006 (US). **MEYER, Eric, R.;** 4185 County Line Road, Greensburg, IN 47240 (US).

(74) **Agent: YERKESON, Douglas, A.;** Bose McKinney & Evans LLP, 2700 First Indiana Plaza, 135 North Pennsylvania Street, Indianapolis, IN 46204 (US).

(81) **Designated States (national):** AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, UZ, VC, VN, YU, ZA, ZM, ZW.

(84) **Designated States (regional):** ARIPO patent (GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Published:

- *with international search report*
- *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:**
1 March 2007

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

INTERNATIONAL SEARCH REPORT

International application No.

PCT/US03/28018

A. CLASSIFICATION OF SUBJECT MATTER

IPC: A61G 7/012(2007.01)

USPC: 5/611,616,600

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. : 5/611,616,600, 86.1, 710, 713, 425

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. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X, T	US 2004/0177445 A1 (OSBORNE et al) 16 September 2004 (16.09.2004), page 16, page 17, lines 1-6 & paragraph 0248, page 18, paragraphs 0251-0259, page 19, lines 1-7, page 44, paragraphs 0540-0549, page 45, page 46, lines 1-5, page 47, paragraphs 0569-0575, page 48, lines 1-13.	1-22

Further documents are listed in the continuation of Box C.

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	"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
"E"	earlier application or patent published on or after the international filing date	"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
"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)	"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
"O"	document referring to an oral disclosure, use, exhibition or other means	"&" document member of the same patent family
"P"	document published prior to the international filing date but later than the priority date claimed	

Date of the actual completion of the international search
04 November 2006 (04.11.2006)

Date of mailing of the international search report
18 DEC 2006

Name and mailing address of the ISA/US
Mail Stop PCT, Attn: ISA/US
Commissioner of Patents
P.O. Box 1450
Alexandria, Virginia 22313-1450

Authorized officer
R. G. Santos
Robert G. Santos
Telephone No. (571) 272-6640

Facsimile No. (571) 273-3201

INTERNATIONAL SEARCH REPORT

International application No.

PCT/US03/28018

Box I Observations where certain claims were found unsearchable (Continuation of Item 1 of first sheet)

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

1. Claim Nos.:
because they relate to subject matter not required to be searched by this Authority, namely:

2. Claim 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. Claim Nos.:
because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a).

Box II Observations where unity of invention is lacking (Continuation of Item 2 of first sheet)

This International Searching Authority found multiple inventions in this international application, as follows:
Please See Continuation 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 fee, this Authority did not invite payment of any additional fee.
 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.: 1-22
- Remark on Protest**
- The additional search fees were accompanied by the applicant's protest.
- No protest accompanied the payment of additional search fees.