



(11) **EP 2 206 485 A3**

(12) **EUROPEAN PATENT APPLICATION**

(88) Date of publication A3:  
**08.09.2010 Bulletin 2010/36**

(51) Int Cl.:  
**A61G 7/015<sup>(2006.01)</sup> A61G 7/005<sup>(2006.01)</sup>**

(43) Date of publication A2:  
**14.07.2010 Bulletin 2010/28**

(21) Application number: **10004349.6**

(22) Date of filing: **17.11.1997**

(84) Designated Contracting States:  
**DE FR GB**

(30) Priority: **18.11.1996 US 31408 P**  
**21.11.1996 US 31666 P**

(62) Document number(s) of the earlier application(s) in accordance with Art. 76 EPC:  
**97949518.1 / 1 006 977**

(71) Applicant: **KINETIC CONCEPTS, INC.**  
**San Antonio TX 78230-4726 (US)**

(72) Inventors:  
• **Vrzalik, John, H.**  
**San Antonio TX 78263 (US)**  
• **Dimitriu, Dan**  
**San Antonio TX 78230 (US)**

- **Stroh, Glenn, C.**  
**Marion TX 78123 (US)**
- **Phillips, Bruce**  
**San Antonio TX 78232 (US)**
- **Gonzales, Felipe**  
**San Antonio TX 78244 (US)**
- **Bartlett, Alan, L.**  
**New Braunfels TX 78132 (US)**
- **Stenberg, Michael**  
**San Antonio, TX 78240 (US)**

(74) Representative: **Moreland, David et al**  
**Marks & Clerk LLP**  
**Aurora**  
**120 Bothwell Street**  
**Glasgow**  
**G2 7JS (GB)**

(54) **Bariatric treatment system**

(57) A bariatric treatment system (100) providing a comprehensive array of therapeutic services for the morbidly obese patient (118) is disclosed. The treatment system (100) generally comprises a stable bed frame (101) upon which is mounted a low air loss therapeutic mattress system (104). Integrated hardware and software controls (170) provide such therapies such as pulsation, percussion, rotation, cardiac chair, and Trendelenburg. Means are disclosed whereby the bariatric patient (118) may safely and comfortably enter and exit the bed (100) with relative ease. The bed (100) is adaptable for transport within a hospital, including such features as a TRANSPORT MODE wherein its lateral axis is minimized and battery backup (178) is provided to maintain necessary therapies during patient transport. A plurality of control means are disclosed for simplification of caregiver workload and ease of patient utilization.

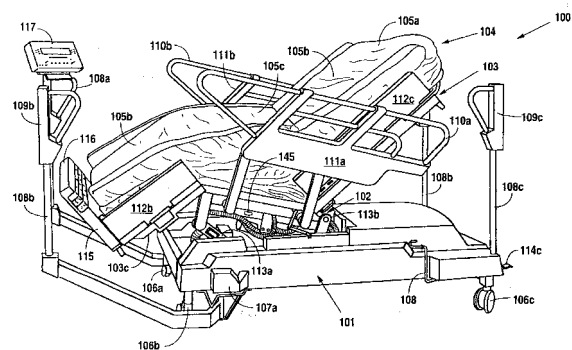


FIG. 1

**EP 2 206 485 A3**



EUROPEAN SEARCH REPORT

Application Number  
EP 10 00 4349

| DOCUMENTS CONSIDERED TO BE RELEVANT  |  |   |   |
|--|--|---|---|
| Category   | Citation of document with indication, where appropriate, of relevant passages  | Relevant to claim   | CLASSIFICATION OF THE APPLICATION (IPC)         |
| Y  | US 4 038 709 A (KERWIT MALCOLM)<br>2 August 1977 (1977-08-02)  | 1-3   | INV.<br>A61G7/015<br>A61G7/005                  |
| A  | * column 3, line 13 - line 45 *<br>* column 4, line 60 - line 66 *<br>* column 4, line 67 - column 5, line 50 *<br>* column 5, line 51 - column 6, line 25 *<br>* figures 1, 4-6 *                               | 4-19  |   |
| Y  | -----<br>US 3 485 240 A (FOUNTAIN EDMUND M)<br>23 December 1969 (1969-12-23)<br>* column 1, line 61 - column 2, line 16 *<br>* column 2, line 36 - line 54 *<br>* figures 1, 2 *                                 | 1   |   |
| Y  | -----<br>US 4 409 695 A (JOHNSTON BRUCE L [US] ET AL)<br>18 October 1983 (1983-10-18)<br>* column 1, line 10 - line 21 *<br>* column 2, line 58 - line 65 *<br>* column 4, line 9 - line 44 *<br>* figures 1-8 * | 2,3   |   |
| A  | -----<br>US 4 977 629 A (JONES BETTY J [US])<br>18 December 1990 (1990-12-18)<br>* column 3, line 32 - column 4, line 28 *<br>* figures 1-4 *  | 1,7   |   |
| The present search report has been drawn up for all claims   |  |   | TECHNICAL FIELDS SEARCHED (IPC)<br>A61G<br>A47C |
| Place of search<br>The Hague   |  | Date of completion of the search<br>30 July 2010  | Examiner<br>Ong, Hong Djien                     |
| CATEGORY OF CITED DOCUMENTS<br>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 |  | 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<br>.....<br>& : member of the same patent family, corresponding document |   |

2  
EPO FORM 1503 03/82 (P04/C01)



Application Number

EP 10 00 4349

**CLAIMS INCURRING FEES**

The present European patent application comprised at the time of filing claims for which payment was due.

- Only part of the claims have been paid within the prescribed time limit. The present European search report has been drawn up for those claims for which no payment was due and for those claims for which claims fees have been paid, namely claim(s):
- No claims fees have been paid within the prescribed time limit. The present European search report has been drawn up for those claims for which no payment was due.

**LACK OF UNITY OF INVENTION**

The Search Division considers that the present European patent application does not comply with the requirements of unity of invention and relates to several inventions or groups of inventions, namely:

see sheet B

- All further search fees have been paid within the fixed time limit. The present European search report has been drawn up for all claims.
- As all searchable claims could be searched without effort justifying an additional fee, the Search Division did not invite payment of any additional fee.
- Only part of the further search fees have been paid within the fixed time limit. The present European search report has been drawn up for those parts of the European patent application which relate to the inventions in respect of which search fees have been paid, namely claims:
- None of the further search fees have been paid within the fixed time limit. The present European search report has been drawn up for those parts of the European patent application which relate to the invention first mentioned in the claims, namely claims:
- The present supplementary European search report has been drawn up for those parts of the European patent application which relate to the invention first mentioned in the claims (Rule 164 (1) EPC).



**LACK OF UNITY OF INVENTION  
SHEET B**

Application Number  
EP 10 00 4349

The Search Division considers that the present European patent application does not comply with the requirements of unity of invention and relates to several inventions or groups of inventions, namely:

1. claims: 1-6

A bariatric patient support system comprising at least two independently inflatable bladders supported by the frame and configured to laterally rotate the human patient during use.

---

2. claims: 7-19

A bariatric patient support system comprising:  
a frame including:  
a load frame coupled to the floor-engaging base frame; and  
a seat assembly coupled to the load frame with at least multiple linear actuators that enable vertical movement between the seat assembly and the load frame; and

---

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

EP 10 00 4349

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.

30-07-2010

| Patent document cited in search report | Publication date | Patent family member(s)                        | Publication date                       |
|--|------------------|--|--|
| US 4038709 A                           | 02-08-1977       | CA 1036753 A1<br>DE 2610204 A1<br>GB 1505801 A | 22-08-1978<br>07-07-1977<br>30-03-1978 |
| US 3485240 A                           | 23-12-1969       | NONE   |  |
| US 4409695 A                           | 18-10-1983       | NONE   |  |
| US 4977629 A                           | 18-12-1990       | NONE   |  |

EPC FORM P0459

For more details about this annex : see Official Journal of the European Patent Office, No. 12/82