

Title (en)

Sensing device for air cushion bed

Title (de)

Messvorrichtung für ein Luftkissenbett

Title (fr)

Dispositif de détection pour lit de coussin d'air

Publication

EP 2662063 A1 20131113 (EN)

Application

EP 12167793 A 20120511

Priority

EP 12167793 A 20120511

Abstract (en)

A sensing device is configured for placing in an air cushion bed below air bladders thereof to detect an exact state of the bed in use, and includes a first and a second sheet connected together to define an air chamber therebetween. The air bladders and the air chamber are communicable with one another via inflation valves on the first sheet and are synchronously and identically inflated. First and second sensing elements are disposed outside and inside the air chamber, respectively. The first sensing element has deformation and acceleration sensors arranged thereon for monitoring how the bed reacts to a patient lying thereon and the manner in which the bed is being used. The second sensing element includes upper and lower conductive sensing sheets and an electrical connection state therebetween is used to detect whether the air bladders are sufficiently inflated. Thus, the air cushion bed is safer for use.

IPC 8 full level

A61G 7/057 (2006.01); **A47C 27/08** (2006.01)

CPC (source: EP)

A47C 27/083 (2013.01); **A61G 7/05769** (2013.01); **A61G 2203/30** (2013.01); **A61G 2203/36** (2013.01); **A61G 2203/40** (2013.01);
A61G 2203/42 (2013.01)

Citation (search report)

- [A] US 2010094175 A1 20100415 - HOVORKA GEORGE [US]
- [A] JP 2003164497 A 20030610 - TANITA SEISAKUSHO KK
- [A] WO 2011101109 A1 20110825 - EKAMED GMBH & CO KG [DE], et al

Cited by

CN109288298A; US10206248B2; US11452382B2; US9839300B2; WO2015157674A3; WO2015116305A1; EP2664315B1; US10506668B2; US10849193B2; US11388782B2; US10201935B2; US11465364B2; US11691350B2; US12011883B2; US9962122B2; US10433792B2; US10575784B2; US10765580B1; US10959675B2; US10980694B2; US10993866B2; US11103188B2; US11278463B2; US11382817B2; US11559259B2; US11576833B2; US11801188B2; US12097152B2

Designated contracting state (EPC)

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

Designated extension state (EPC)

BA ME

DOCDB simple family (publication)

EP 2662063 A1 20131113; EP 2662063 B1 20150318

DOCDB simple family (application)

EP 12167793 A 20120511