

Title (en)

AIR MATTRESS SYSTEM AND INFLATION AND DEFLATION PRESSURE REGULATION SYSTEM AND METHOD

Title (de)

LUFTMATRATZENSYSYSTEM UND AUFPUMP- UND ABLASS-DRUCKREGULIERUNGSSYSTEM UND VERFAHREN

Title (fr)

SYSTÈME DE MATELAS D'AIR ET SYSTÈME ET PROCÉDÉ DE RÉGULATION DE PRESSION DE GONFLAGE ET DE DÉGONFLAGE

Publication

**EP 3072419 A1 20160928 (EN)**

Application

**EP 15160249 A 20150323**

Priority

EP 15160249 A 20150323

Abstract (en)

An inflation and deflation pressure regulation system (10) is applicable to an air mattress (14) with at least two air arrays (A, B), the inflation and deflation pressure regulation system (10) comprising an inflation and deflation device (11), a pressure detection unit (12) and a control unit (13). The inflation and deflation device (11) inflates or deflates the air mattress (14); the pressure detection unit (12) continuously detects an instantaneous pressure value of the air mattress (14); the control unit (13) determines whether the instantaneous pressure value detected by the pressure detection unit (12) when the air mattress (14) is in a weight-bearing state has reached a preset pressure value before a preset time has elapsed, and accordingly uses a first inflation and deflation strategy or a second inflation and deflation strategy to control the inflation and deflation device (11) to inflate or deflate the air mattress (14). An inflation and deflation pressure regulation method and an air mattress system (1) using the inflation and deflation pressure regulation system (10) are also provided.

IPC 8 full level

**A47C 27/08** (2006.01); **A47C 27/10** (2006.01); **A61G 7/057** (2006.01)

CPC (source: EP)

**A61G 7/05769** (2013.01)

Citation (search report)

- [XA] EP 2250988 A2 20101117 - HILL ROM SERVICES INC [US]
- [I] EP 0168213 A2 19860115 - TALLEY MEDICAL EQUIPMENT LTD [GB]
- [I] US 2008005843 A1 20080110 - LOKHORST DAVID M [CA], et al
- [A] WO 2009044201 A1 20090409 - HUTCHINSON PHILIP JAMES [GB], et al

Cited by

CN108007634A

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 3072419 A1 20160928; EP 3072419 B1 20190911**

DOCDB simple family (application)

**EP 15160249 A 20150323**