

3) Family number: 32869008 (US2006087160A)

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Title: APPARATUS FOR PROVIDING FLUID THROUGH A VEHICLE SEAT

Abstract: A seat assembly comprises a seat cushion having an outer surface comprising a front side for supporting an occupant in a sitting position and a rear side. A base member is positioned on the rear side of the seat cushion. An adjustable lumbar support device is provided on the rear side of the seat cushion. A first passage extends through the seat cushion. A ventilation system is provided for distributing air from the first passage along the support surface of the seat cushion. A climate control apparatus is provided for providing climate conditioned air to the ventilation system. A flexible conduit connects the climate control apparatus to the ventilation system.

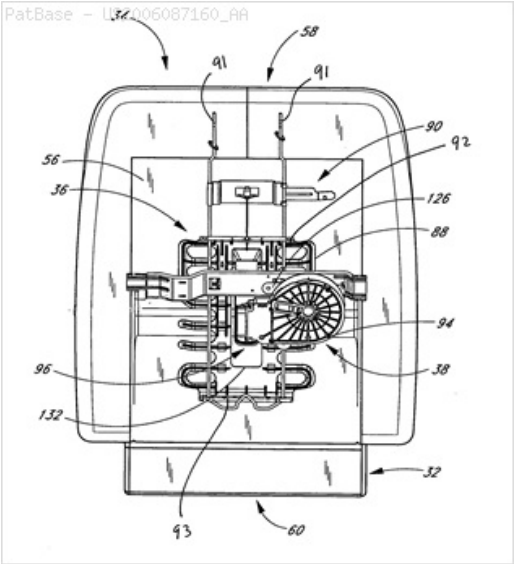
Classifications:

International (IPC 8-9): A47C7/72 (Advanced/Invention);
A47C7/72 (Core/Invention)

CPC: B60N2/667 A47C7/72 A47C7/74 B60N2/5635 B60N2/5692
B60N2/66 B60N2/6671 B60N2/6673

European: A47C7/72 A47C7/74

US: 297/180.12 297/180.120P 297/180.13 297/180.130P 297/180.15
297/180.150S



Family:

Publication number	Publication date	Application number	Application date
US2006087160 AA	20060427	US20040973947	20041025
US2007262621 AA	20071115	US20070696107	20070403

Priority:

US20040973947 20041025 US20070696107 20070403

Probable Assignee:

AMERIGON INC

Assignee(s): (std):

DONG HANH ; LOFY JOHN ; MARQUETTE DAVID

Assignee(s):

AMERIGON INC

Inventor(s): (std):

DONG HANH ; LOFY JOHN ; MARQUETTE DAVID

Agent(s):

KNOBBE MARTENS OLSON AND BEAR LLP

4) Family number: 41730015 (US2008087316A)

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Title: THERMOELECTRIC DEVICE WITH INTERNAL SENSOR

Abstract: A thermoelectric system which comprises two substrates spaced apart from each other to form a gap and a plurality of electrically-connected semiconductor elements disposed between the substrates in the gap. The thermoelectric system further comprises at least one sensor and a seal which extends between the substrates and encloses the sensor and at least one of the plurality of semiconductor elements. The sensor is disposed between the substrates at an interior location spaced from the peripheral edge of at least one of the substrates. Additionally, at least one of the semiconductor elements is disposed between the sensor and the peripheral edge.

Classifications:

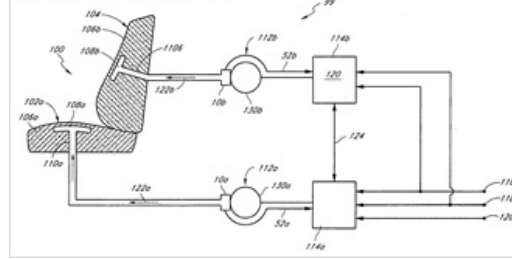
International (IPC 8-9): B60N2/56 F25B21/02 H01L35/28 H01L35/32
H05B6/10 (Advanced/Invention);

H01L35/28 H05B6/10 (Core/Invention)

CPC: F25B21/02 B60N2/5692 H01L35/32

European: B60N2/56E4 H01L35/32

US: 1/1 136/204 219/632 62/3.7

**Family:**

Publication number	Publication date	Application number	Application date
US2008087316 AA	20080417	US20060546928	20061012
US2015176870 AA	20150625	US20140552130	20141124
US2018172325 AA	20180621	US20170842535	20171214
US9857107 BB	20180102	US20140552130	20141124
WO08045964 A2	20080417	WO2007US80990	20071010
WO08045964 A3	20080821	WO2007US80990	20071010

Priority:

US20060546928 20061012 US20140552130 20141124 US20170842535 20171214

Probable Assignee: GENTHERM INC

Assignee(s): (std): CLARK JAY CHRISTOPHER ; COMISKEY BRIAN ; GENTHERM INC ; INABA MASA ; AMERIGON INC

Assignee(s): BANK OF AMERICA NA ; BANK OF AMERICA NA ADMINISTRATIVE AGENT AS

Inventor(s): (std): COMISKEY BRIAN ; INABA MASA ; CLARK JAY CHRISTOPHER ; INABA MASAHIKO

Agent(s): KNOBBE MARTENS OLSON AND BEAR LLP; DELANEY KAROLINE A

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

5) Family number: 65468017 (US2017198947A)

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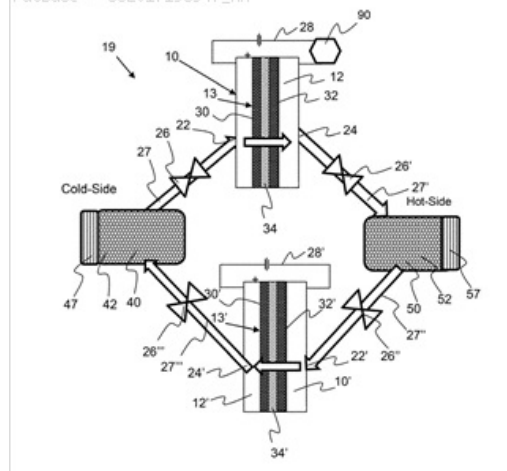
Title: ADVANCED METAL HYDRIDE HEAT TRANSFER SYSTEM UTILIZING AN ELECTROCHEMICAL HYDROGEN COMPRESSOR

Abstract: An electrochemical heat transfer device utilizes an electrochemical hydrogen compressor to pump hydrogen into and out of a reservoir having a metal hydride forming alloy therein. The absorption of hydrogen by the metal hydride forming alloy is exothermic, produces heat, and the desorption of the hydrogen from the metal hydride forming alloy is endothermic and draws heat in. An electrochemical hydrogen compressor may be configured between to reservoirs and pump hydrogen back and forth to form a heat transfer device. A heat exchange device may be coupled with the reservoir or may comprise the outer surface of the reservoir to transfer heat to an object or to the surroundings. A closed loop may be configured having two reservoirs and one or two electrochemical hydrogen compressors to pump the hydrogen in a loop around the system.

Classifications:

International (IPC 8-9): A47C7/74 B60N2/56 C01B3/00 C01B3/06 C09K5/16 F17C11/00 F24F5/00 F24H4/02 F25B F25B1/00 F25B13/00 F25B15/09 F25B17/12 F25B25/02 F25B30/00 F25B30/04 F25B35/04 H01M8/04007 H01M8/04014 H01M8/04082 H01M8/04089 H01M8/1004 H01M8/18 (Advanced/Invention)
CPC: F25B13/00 F25B1/00 F25B30/00 F25B25/02 F25B2500/18 Y02B30/62 Y02A30/277 H01M8/186 H01M8/1004 C01B3/065 H01M8/04089 H01M8/04216 H01M8/04007 H01M8/04067 H01M8/04201 H01M2008/1095 H01M8/04014 H01M8/065 H01M8/0662 C25B1/10 C25B11/04 C25B15/08 C09K5/16 F17C11/005 F25B35/04 Y02E60/321 A47C7/744 A47C7/748 B60N2/5678 B60N2/5692 C01B3/0031 F25B15/09 F25B30/04 F24H4/02 F24F5/0014 F25B17/12
US: 1/1 297/180.12 429/417 62/46.2

PatBase - US2017198947_AA

**Family:**

Publication number	Publication date	Application number	Application date
GB201700494 A0	20170222	GB20170000494	20170111
GB201812773 A0	20180919	GB20180012773	20180806
GB201900837 A0	20190313	GB20190000837	20190121
GB2547774 A1	20170830	GB20170000494	20170111
GB2566604 A1	20190320	GB20180012773	20180806
GB2573594 A1	20191113	GB20190000837	20190121
HK1236606 A1	20180329	HK20170110548	20171018

US2017198947 AA	20170713	US20170403299	20170111
US2017241677 AA	20170824	US20170448747	20170303
US2018351193 AA	20181206	US20180056116	20180806
US2019293324 AA	20190926	US20190254427	20190122
US10508836 BB	20191217	US20170448747	20170303

Priority:

US20160277399P	20160111	US20160288417P	20160128	US20160292529P	20160208
US20160297123P	20160218	US20160300082P	20160226	US20160303285P	20160303
US20160303300P	20160303	US20160308060P	20160314	US20160315664P	20160330
US20160324337P	20160418	US20160326532P	20160422	US20170403299	20170111
US20170448747	20170303	US20170541605P	20170804	US20180619768P	20180120
US20180056116	20180806	US20190254427	20190122		

Probable Assignee: XERGY LTD

Assignee(s): (std): XERGY INC ; XERGY LTD

Inventor(s): (std): PARMELEE WILLIAM ; BAHAR BAMDAD ; WILLIAM PARMELEE ; BAMDAD BAHAR ; ZERBY JACOB ; FACKLER SCOTT ; SCOTT FACKLER ; JACOB ZERBY

Agent(s): BORSAM INTELLECTUAL PROPERTY LTD; INVENTION TO PATENT SERVICES; HOBSON ALEX

6) Family number: 74602020 (US2019167499A)

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Title: MULTI-FUNCTION HEADBOARD FOR PATIENT SUPPORT APPARATUS

Abstract: A patient support apparatus comprises a support structure, an articulation system, and a headboard assembly. The support structure comprises a head end, a foot end, a base, and a patient support deck to support a patient between the head end and the foot end. The patient support deck comprises a first section and a second section capable of articulating relative to the first section. The articulation system articulates the second section relative to the first section. The headboard assembly is coupled to the second section to be arranged adjacent to a head of the patient lying on the patient support deck. At least a portion of the headboard assembly articulates with the second section when the second section articulates relative to the first section. The headboard assembly comprises one or more environment controls operable to alter an environment of the patient on the patient support deck.

Classifications:

International (IPC 8-9): A61G12/00 A61G7/015 A61G7/05

A61M21/02 (Advanced/Invention)

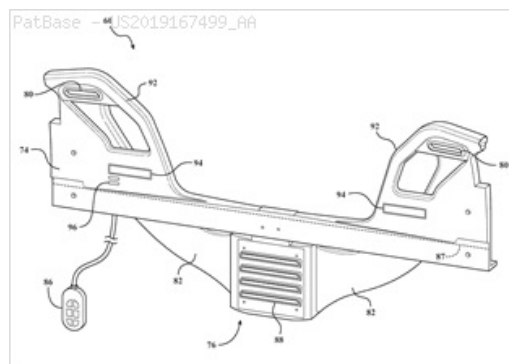
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A61M2205/07 A61M2205/3673 A61M2205/502 A61M2205/587

A61M2209/082 F24F11/50

US: 1/1



Family:

Publication number	Publication date	Application number	Application date
US2019167499 AA	20190606	US20180204148	20181129

Priority:

US20170592946P	20171130	US20180204148	20181129
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Probable Assignee: STRYKER CORP

Assignee(s): (std): STRYKER CORP

Assignee(s): DISHER CORP

Inventor(s): (std): CROUCH CHARLES LOUIS ; NAHAVANDI KUROSH

7) Family number: 29787021 (US2003212303A)

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Title: MANIPULATION DEVICE WITH BUOYANCY BREATH MONITOR

Abstract: A device for monitoring the breath of a user includes a tub containing a liquid for at least partially immersing the user in the liquid and a weight sensor positioned to sense weight information of the user while the user is at least partially immersed in the liquid. A controller is operably connected to the weight sensor to receive the weight information and is adapted to dynamically determine at least one of a respiratory phase of the user and a respiratory amplitude of the user using changes in the weight information over a period of time resulting from buoyancy changes of the user. The respiratory phase and/or the respiratory amplitude can be utilized to detect volitional breath commands, to detect pain thresholds of the user, to provide breath synchronized manipulations to the user, and to provide breath synchronized coaching signals to the user.

Classifications:

International (IPC 8-9): A61B5/08 A61H1/00 A61H15/00 A61H35/00

A61N5/00 (Advanced/Invention);

A61B5/08 A61H1/00 A61H15/00 A61H35/00 A61N5/00 (Core/Invention);

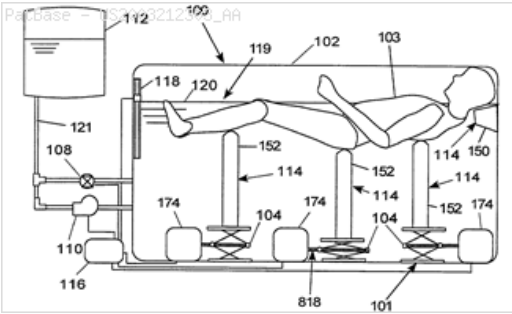
A61H (Subclass/Invention)

International (IPC 1-7): A61B5/08 A61H15/00 A61N5/00

CPC: A61H1/00 A61H2201/0103 A61H2201/1654 A61H33/6089

A61H15/00 A61B5/0806 A61H1/008 A61H35/002

European: A61B5/08F A61H1/00P A61H15/00 A61H35/00B
US: 600/3 600/529 600/534 601/103 601/108 601/116 601/98



Family:

Publication number	Publication date	Application number	Application date
AU2003231253 AA	20031124	AU20030231253	20030502
AU2003231253 AA	20031111	AU20030231253	20030502
AU2003231253 AH	20031111	AU20030231253	20030502
US2003212303 AA	20031113	US20020142247	20020509
US2003212352 AA	20031113	US20020142354	20020509
US6669649 BB	20031230	US20020142247	20020509
US6752772 BB	20040622	US20020142354	20020509
WO03094820 A2	20031120	WO2003US13691	20030502
WO03094820 A3	20040527	WO2003US13691	20030502

Priority:

US20020369776P 20020403 US20020142247 20020509 US20020142354 20020509
WO2003US13691 20030502

Probable Assignee: KAHN ROCKY

Assignee(s): (std): KAHN ROCKY

Inventor(s): (std): KAHN ROCKY ; ROCKY KAHN

Designated states: AE AG AL AM AT AU AZ BA BB BE BF BG BJ BR BY BZ CA CF CG CH CI CM CN CO CR CU CY CZ DE DK DM
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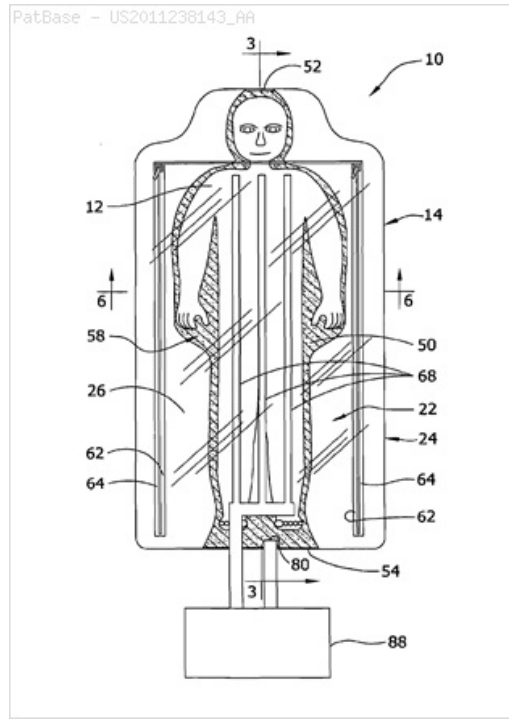
8) Family number: 44340029 (US2011238143A) © PatBase

Title: SYSTEM AND METHOD FOR ALTERING AND MAINTAINING THE BODY TEMPERATURE OF A PATIENT

Abstract: A system includes a temperature reducing apparatus having a first enclosure defining an interior space for receiving at least a portion of a patient's body therein, and a liquid delivery system in fluid communication with the first enclosure for controlling the temperature of a heat transfer liquid and delivering the heat transfer liquid into the first enclosure in direct contact with the patient's body portion when received in the first enclosure. A temperature maintenance apparatus includes a second enclosure defining an interior space for receiving at least a portion of a patient's body therein, and a gas delivery system in fluid communication with the second enclosure for controlling the temperature of a heat transfer gas and delivering the heat transfer gas into the second enclosure in direct contact with the patient's body portion when received in the second enclosure. The second enclosure is different than the first enclosure.

Classifications:

International (IPC 8-9): A61F7/00 (Advanced/Invention);
A61F7/00 (Core/Invention)
CPC: A61F7/0053 A61F2007/0054 A61F2007/0055 A61F2007/0056
A61F2007/0057 A61F2007/0076 A61F2007/0096 A61F2007/0292
European: A61F7/00B K61F7/00C K61F7/00C1 K61F7/00C2
K61F7/00C2A K61F7/00E2R K61F7/00T1 K61F7/02S
US: 607/104 607/104P

**Family:**

Publication number	Publication date	Application number	Application date
EP2320839 A2	20110518	EP20090805497	20090805
EP2320839 A4	20111214	EP20090805497	20090805
US2011238143 AA	20110929	US20090057664	20090805
WO10017287 A2	20100211	WO2009US52838	20090805
WO10017287 A3	20100401	WO2009US52838	20090805

Priority:

US20080087044P 20080807 US20090057664 20090805 WO2009US52838 20090805

Probable Assignee: LIFE RECOVERY SYSTEMS HD LLC

Assignee(s): (std): FREEDMAN ROBERT J JR ; LIFE RECOVERY SYSTEMS HD LLC ; SCHOCK ROBERT B

Assignee(s): FREEDMAN ROBERT J

Inventor(s): (std): FREEDMAN JR ROBERT J ; SCHOCK ROBERT B ; FREEDMAN ROBERT J JR

Inventor(s): FREEDMAN ROBERT J

Agent(s): SMAGGASGALE GILLIAN HELEN; BRIDGE RICHARD L ET AL

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

9) Family number: 33902030 (US2009118869A)

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Title: HEATING AND COOLING SYSTEM FOR PET ENCLOSURES

Abstract: Various embodiments of the invention are directed toward a heating and cooling system for pet living spaces, which is easily transportable and is efficient in heating and cooling the pet because it heats and cools both the air surrounding the pet and the surfaces that the pet lays upon.

Classifications:

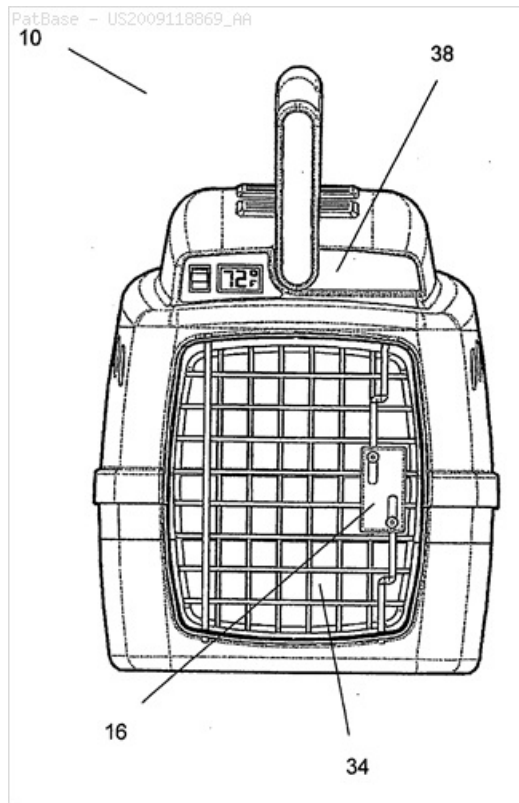
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A01K1/02 F24H3/02 F25B21/02 G05B15/00 (Core/Invention)

CPC: G05D23/1917 A01K1/0236 A01K1/0245 A01K1/033 F24F5/0042

European: A01K1/02D A01K1/02D1 A01K1/03C F24F5/00D

US: 119/482 119/487 119/500 165/121 165/121S 62/3.2 62/3.200S 700/276 700/276P



Family:

Publication number	Publication date	Application number	Application date
CN101257793 A	20080903	CN200680027401	20060322
EP1893015 A1	20080305	EP20060739641	20060322
US2009118869 AA	20090507	US20060569431	20060322
US2010319627 AA	20101223	US20100870758	20100827
US8291866 BB	20121023	US20100870758	20100827
WO06127110 A1	20061130	WO2006US10960	20060322

Priority:

US20050684328P 20050525 US20060569431 20060322 WO2006US10960 20060322
US20100870758 20100827

Probable Assignee: COVENANT PARTNERS INC

Assignee(s): (std): CAUCHY MATT ; COVENANT PARTNERS INC ; MCKINNEY CECIL

Inventor(s): (std): CAUCHY MATT ; CAUCHY MATI ; CECIL MCKINNEY ; MCKINNEY CECIL

Agent(s): LOUISET RAPHAEL; MARC E HANKIN ESQ; KEVIN; HANKIN PATENT LAW APC; MARC E

Designated states: AE AG AL AM AT AU AZ BA BB BE BF BG BJ BR BW BY BZ CA CF CG CH CI CM CN CO CR CU CY CZ DE DK DM DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GW HR HU ID IE IL IN IS IT JP KE KG KM KN KP KR KZ LC LI LK LR LS LT LU LV LY MA MC MD MG MK ML MN MR MW MX MZ NA NE NG NI NL NO NZ OM PG PH PL PT RO RU SC SD SE SG SI SK SL SM SN SY SZ TD TG TJ TM TN TR TT TZ UA UG US UZ VC VN YU ZA ZM ZW

10) Family number: 63601037 (US2016276568A)

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Title: ENERGY HARVESTING MATTRESS WITH THERMOELECTRIC FABRIC

Abstract: Energy harvesting mattresses, systems, and methods of cooling mattresses are disclosed herein. In some aspects, the energy harvesting mattress can include a body support having a proximal surface that is configured to support a sleeper and a flexible thermoelectric fabric comprising at least one p-type layer coupled to at least one n-type layer to provide at least one p-n junction. The flexible thermoelectric fabric can be configured to be in thermal communication with the proximal surface of the body support such that when the proximal surface is heated the flexible thermoelectric fabric generates a current.

Classifications:

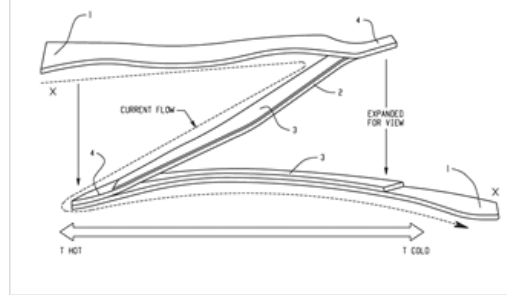
International (IPC 8-9): A47C21/00 A47C21/04 A47C27/00 A47C31/00
A47C7/74 B82Y30/00 H01L35/28 H01L35/32

H02N2/18 (Advanced/Invention)

CPC: H01L35/325 A47C31/00 A47C27/00 H02N2/18 A47C21/00

A47C21/003

US: 1/1 136/212

**Family:**

Publication number	Publication date	Application number	Application date
AU2016233239 AA	20170907	AU20160233239	20160317
CA2978337 AA	20170830	CA20162978337	20160317
CN107405007 A	20171128	CN201680016192	20160317
EP3270737 A1	20180124	EP20160715176	20160317
US2016276568 AA	20160922	US20160072419	20160317
WO16149476 A1	20160922	WO2016US22820	20160317

Priority:

US20150134156P 20150317 US20160072419 20160317 WO2016US22820 20160317

Probable Assignee: DREAMWELL LTD

Assignee(s): (std): DREAMWELL LTD

Assignee(s): GOLDMAN SACHS BANK USA ADMINISTRATIVE AGENT AS ; GOLIN MICHAEL A ; UBS STAMFORD BRANCH ADMINISTRATIVE AGENT AG AS ; DEFRANKS MICHAEL S

Inventor(s): (std): GOLIN MICHAEL A ; DEFRANKS MICHAEL S

Agent(s): PHILLIPS ORMONDE FITZPATRICK; NORTON ROSE FULBRIGHT CANADA LLP SENCRL SRL; JOHNSON YVONNE CATHERINE; HAGERTY PETER

Designated states: AE AG AL AM AO AT AU AZ BA BB BE BF BG BH BJ BN BR BW BY BZ CA CF CG CH CI CL CM CN CO CR CU CY CZ DE DK DM DO DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GT GW HN HR HU ID IE IL IN IR IS IT JP KE KG KM KN KP KR KZ LA LC LI LK LR LS LT LU LV LY MA MC MD ME MG MK ML MN MR MT MW MX MY MZ NA NE NG NI NL NO NZ OM PA PE PG PH PL PT QA RO RS RU RW SA SC SD SE SG SI SK SL SM SN ST SV SY SZ TD TG TH TJ TM TN TR TT TZ UA UG US UZ VC VN ZA ZM ZW

11) Family number: 28448038 (US2004231051A)

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Title: SUPPORTING SPRING SYSTEM FOR MATTRESSES OR THE LIKE AND USE OF A SUPPORTING SPRING SYSTEM OF THIS TYPE

Abstract: Supporting spring systems for mattresses or the like usually have slats which are mounted at their opposite ends on a frame by means of elastic bearing means. It is known to individually adapt the bearing means with regard to their spring properties to the individual lying thereon. However, this alone is not adequate for sick people. The supporting spring system according to the invention is designed in such a manner that at least individual slats can be individually raised and lowered in the regions of their bearing means. This enables the supporting spring system to execute any desired movements which are transferred via the mattress to the individual lying on it. These movements of the mattress enable, in particular, prevention or treatment of bed sores. In addition, these movements are also suitable for stimulating patients with certain clinical characteristics, in particular patients whose mobility is limited and thus suffer from lack of stimulus. The supporting spring system according to the invention may also be used in the treatment of pain.

Classifications:

International (IPC 8-9): A47C17/04 A47C23/06 A47C23/30 A61G7/015 A61G7/05 (Advanced/Invention);

A47C17/00 A47C23/00 A61G7/00 A61G7/002 A61G7/05 (Core/Invention)

International (IPC 1-7): A47C17/04 A47C23/00 A47C23/06 A61G7/05

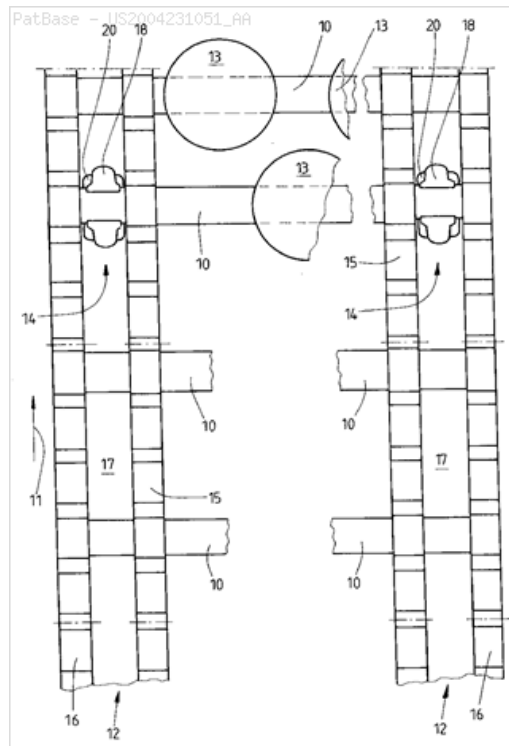
CPC: A47C23/064 A47C23/065 A47C23/067

European: A47C23/06C2D A47C23/06C4 A47C23/06C8 A47C23/06D1 A47C23/06F A47C23/06H

US: 5/236.1 5/236.100P 5/239 5/239P 5/264.1 5/264.100S 5/613 5/613S

JP F-Term: 3B092 4C040 4C040/AA30 4C040/BB06 4C040/CC10 4C040/DD08 4C040/DD10 4C040/EE02 4C040/EE08 4C040/GG03

JP F-Index: A47C17/04/C A61G7/04 A61G7/05



Family:

Publication number	Publication date	Application number	Application date
AT398404 E	20080715	AT20020777193T	20020925
DE10148569 A1	20030508	DE20011048569	20011001
DE50212389 D1	20080731	DE20025012389	20020925
EP1432336 A1	20040630	EP20020777193	20020925
EP1432336 B1	20080618	EP20020777193	20020925
ES2305308 T3	20081101	ES20020777193T	20020925
JP2005503880 T2	20050210	JP20030531858T	20020925
US2004231051 AA	20041125	US20040490082	20040318
US2006150327 AA	20060713	US20050292482	20051202
WO03028511 A1	20030410	WO2002EP10715	20020925

Priority:

DE20011048569 20011001 WO2002EP10715 20020925 US20040490082 20040318
US20050292482 20051202

Probable Assignee: THOMAS HILFEN HILBEG GMBH AND CO KG

Assignee(s): (std): THOMAS HILFEN HILBEG GMBH AND CO ; JANSEN KLAUS ; VENT MICHAEL

Assignee(s): THOMAS HILFEN HILBEG GMBH ; THOMAS HILFEN HILBEG GMBH AND CO KG ; THOMAS HILFEN HILBEG GMBH AND CO KOMMANDITGESELLSC ; THOMAS HILFEN HILBEG GMBH AND CO KOMMANDITGESELLSCHAFT

Inventor(s): (std): VENT MICHAEL ; JANSEN KLAUS

Agent(s): MOELLER FRIEDRICH; POWELL GOLDSTEIN LLP

Designated states: AT BE BG CH CY CZ DE DK EE ES FI FR GB GR IE IT JP LI LU MC NL PT SE SK TR US

12) Family number: 23006038 (US2991627A)

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Title: THERMOELECTRIC BLANKET

Abstract: (Claim 1) 1. A thermal blanket comprising a pair of spaced layers of cloth material and a layer of flexible non-conductive, foam rubber therebetween, said foam rubber having a plurality of grooves therein separated by ridges of said foam rubber and a plurality of Peltier junction units in each groove, each unit including a member of p-type semiconducting material and a member of n-type semiconducting material and means adjacent a first side of said blanket establishing conductive contact between said semiconducting materials of each unit, means serially connecting the Peltier units in each groove and including a flexible strap conductively connected between the p-type member of one unit and the n-type member of the next adjacent unit in one direction, means serially connecting the pluralities of Peltier junction units in the several rows with p-type members conductively joined to n-type members in the respective grooves, means establishing an electron current from the n-type member to the p-type member in each unit, the height of said units being less than the depth of said grooves to form a passage between said units and the second of said cloths and means for circulating ambient air through said passage to absorb and remove heat from the portions of said units remote from said first side whereby cooling of said first side of said blanket occurs.

Classifications:

International (IPC 8-9): A47G9/02 A61F7/10 H05B3/14

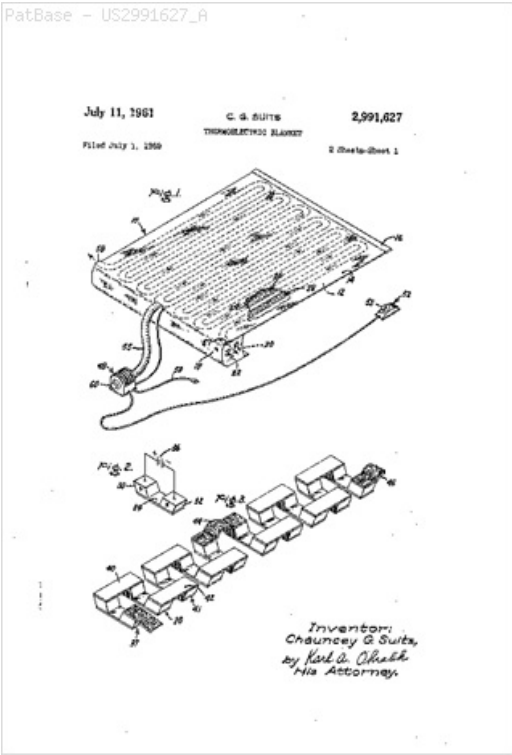
H05B3/34 (Advanced/Invention);

A61F7/00 (Advanced/Non-invention);

A47G9/02 A61F7/00 H05B3/14 H05B3/34 (Core/Invention)

International (IPC 1-7): F25B21/02 H05B3/34

CPC: H01L35/32 A47G9/0215 A61F7/10 A61F2007/0075 H05B3/14
H05B3/342 H05B2203/005 H05B2203/017
European: A47G9/02A2 A61F7/10 H05B3/14 H05B3/34B K61F7/00E2
T05B203/005 T05B203/017
US: 165/46 219/212 5/498 62/259.3 62/3.5



Family:

Publication number	Publication date	Application number	Application date
FR1262837 A	19610605	FR19600831733	19600701
US2991627 A	19610711	US19590824281	19590701

Priority:

US19590824281 19590701

Probable Assignee: GEN ELECTRIC

Assignee(s): (std): GEN ELECTRIC ; THOMSON HOUSTON COMP FRANCAISE

Assignee(s): GENERAL ELECTRIC CO ; GENERAL ELECTRIC COMPANY ; COMPAGNIE FRANCAISE THOMSON HOUSTON ; FRANCAISE THOMSON HOUSTON COMP

Inventor(s): (std): SUITS CHAUNCEY G

13) Family number: 41152044 (US2008023597A)

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Title: ENHANCED COMFORT WRIST REST ASSEMBLY

Abstract: An adjustable wrist rest assembly includes a base housing and a pump assembly residing in the housing. A bladder is provided in fluid communication with the pump where the bladder is configured and arranged to receive a user's wrist region thereon. A optional pump button may be connected to the pump assembly with an optional release button connected to the pump assembly. The configuration of the bladder custom adjusts the receipt of the user's wrist region thereon and the comfort associated therewith.

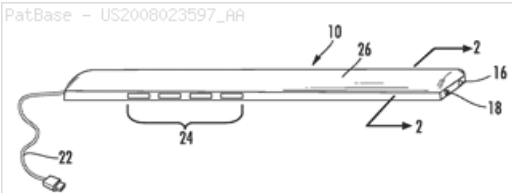
Classifications:

International (IPC 8-9): B43L15/00 (Advanced/Invention); B43L15/00 (Core/Invention)

CPC: A61F7/007 A61F2007/0035 A61F2007/0071 A61F2007/0075 A61F2007/0078 G06F1/1632 G06F3/0202

European: A61F7/00E G06F1/16P6 G06F3/02A K61F7/00A4G K61F7/00E1 K61F7/00E2 K61F7/00E3B

US: 248/118.3



Family:

Publication number	Publication date	Application number	Application date
US2008023597 AA	20080131	US20070828856	20070726

Priority:

US20060820634P 20060728 US20070828856 20070726

Probable Assignee: POLYWORKS INC

Assignee(s): (std): POLYWORKS INC

Inventor(s): (std): FOX RICHARD B ; WYNER DANIEL M ; LAFLAMME ROGER J ; STOKES RICHARD CHRISTOPHER ; CAFARO THOMAS F

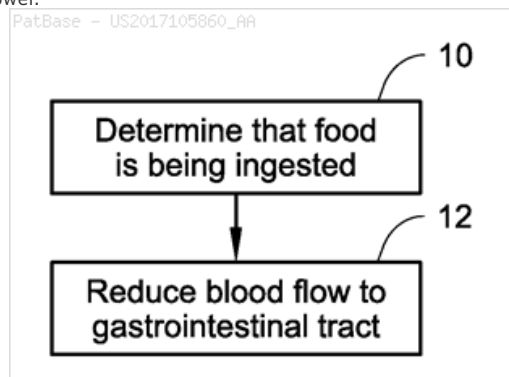
Agent(s): BARLOW JOSEPHS AND HOLMES LTD

Title: APPARATUS AND METHODS OF INDUCING WEIGHT LOSS USING BLOOD FLOW CONTROL

Abstract: Methods and apparatus for inducing weight loss using blood flow control are described herein. The apparatus and methods operate by controlling blood flow to the stomach and/or small bowel.

Classifications:

International (IPC 8-9): A61B17/12 A61B18/14 A61B18/18 A61B5/00 A61B5/026 A61B5/03 A61F2/00 A61F2/02 A61F5/00 A61F7/12 A61N1/05 A61N1/36 (Advanced/Invention); A61B17/00 A61B18/00 A61B90/00 A61F7/02 (Advanced/Non-invention)
CPC: A61F5/0013 A61B5/026 A61B5/03 A61B5/4205 A61B5/4238 A61B17/12013 A61B18/1492 A61B18/1815 A61B2017/00818 A61B2018/00404 A61B2018/00577 A61B2018/00613 A61F7/123 A61F2007/126 A61N1/0556 A61N1/36007 A61B5/6876 A61B2017/00106 A61B2017/00199 A61B2018/0022 A61B2018/00434 A61B2018/00494 A61B2018/00863 A61B2090/063 A61B2090/064 A61F2005/0016 A61F2007/0261 A61N1/3606
US: 1/1 514/789



Family:

Publication number	Publication date	Application number	Application date
US2017105860 AA	20170420	US20150123094	20150305
US2019021890 AA	20190124	US20180142974	20180926
US10123896 BB	20181113	US20150123094	20150305
WO15134747 A1	20150911	WO2015US18965	20150305

Priority:

US20140949024P 20140306 US20150123094 20150305 WO2015US18965 20150305
 US20160123094 20160901 US20180142974 20180926

Probable Assignee: MAYO FOUNDATION FOR MEDICAL EDUCATION AND RESEARCH

Assignee(s): (std): MAYO FOUND MEDICAL EDUCATION AND RES ; MAYO FOUNDATION ; MAYO FOUNDATION FOR MEDICAL EDUCATION AND RES

Assignee(s): MAYO FOUNDATION FOR MEDICAL EDUCATION AND RESEARCH

Inventor(s): (std): ASIRVATHAM SAMUEL J ; BUTTAR NAVTEJ S ; FARRUGIA GIANRICO ; BINGENER CASEY JULIANE ; BRUCE CHARLES J ; FRIEDMAN PAUL A ; WONG KEE SONG LOUIS MICHEL ; LEVY MICHAEL J ; RAJAN ELIZABETH

Agent(s): MUETING RAASCH AND GEBHARDT PA; GOEDEN MATTHEW C

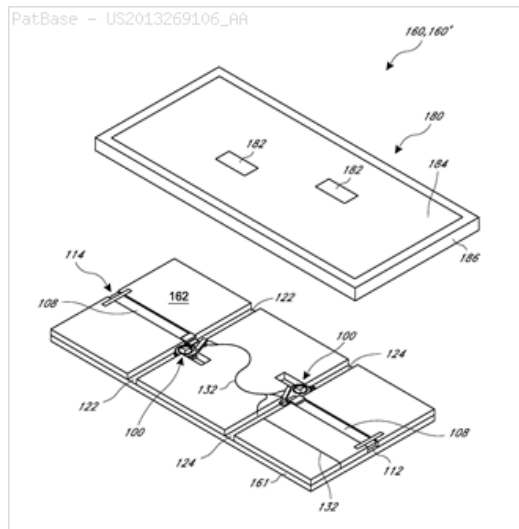
Designated states: AE AG AL AM AO AT AU AZ BA BB BE BF BG BH BJ BN BR BW BY BZ CA CF CG CH CI CL CM CN CO CR CU CY CZ DE DK DM DO DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GT GW HN HR HU ID IE IL IN IR IS IT JP KE KG KM KN KP KR KZ LA LC LK LR LS LT LU LV LY MA MC MD ME MG MK ML MN MR MT MW MX MY MZ NA NE NG NI NL NO NZ OM PA PE PG PH PL PT QA RO RS RU RW SA SC SD SE SG SI SK SL SM SN ST SV SY SZ TD TG TH TJ TM TN TR TT TZ UA UG US UZ VC VN ZA ZM ZW

Title: CLIMATE CONTROLLED BED ASSEMBLY WITH INTERMEDIATE LAYER

Abstract: According to some embodiments, a climate controlled bed or other seating assembly comprises an upper portion or mattress having at least one fluid distribution member (e.g., spacer fabric) that is in fluid communication with the at least one internal passageway of the upper portion, wherein the at least one fluid distribution member is configured to at least partially distribute fluid within the fluid distribution member. In some embodiments, the internal passageway terminates at or near a bottom surface of the upper portion or mattress. The bed or other seating assembly additionally includes one or more inlays or interlays or intermediate layers, or components thereof, positioned between the upper portion and a foundation.

Classifications:

International (IPC 8-9): A47C21/04 A47C7/74 (Advanced/Invention)
CPC: A47C21/04 A47C21/044 A47C21/048 A47C7/744 A61G2210/70 A61G2210/90
US: 1/1 5/423



Family:

Publication number	Publication date	Application number	Application date
US2013269106 AA	20131017	US20130774947	20130222
US2016150891 AA	20160602	US20150812775	20150729
US9125497 BB	20150908	US20130774947	20130222
US9974394 BB	20180522	US20150812775	20150729

Priority:

US20070872657 20071015 US20090505355 20090717 US20120602332P 20120223
US20130774947 20130222 US20150812775 20150729

Probable Assignee: GENTHERM INC

Assignee(s): (std): BRYKALSKI MICHAEL J ; GENTHERM INC ; MARQUETTE DAVID ; VIDOJEVSKI ROBERT

Assignee(s): BANK OF AMERICA NA ADMINISTRATIVE AGENT AS

Inventor(s): (std): MARQUETTE DAVID ; VIDOJEVSKI ROBERT ; BRYKALSKI MICHAEL J

Agent(s): KNOBBE MARTENS OLSON AND BEAR LLP

16) Family number: 27917053 (US2002023594A)

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Title: Air-conditioned animal transporter

Abstract: An apparatus for transporting in an air-conditioned environment animals. The apparatus uses crushed ice to air-condition an insulator animal container at approximately 74 degrees Fahrenheit in ambient temperatures up to 120 degrees Fahrenheit for 12 hours on one twenty pound charge of ice. The preferred embodiment is self-contained providing storage for the animal, ice, and electric power for a ventilation fan plus food and water. The device operates on 12 volts DC and may serve to transport animals in enclosed motor vehicles and common carriers including airline. A intrinsically safety backup system will keep the animal cool, provided ice is present, upon failure of the ventilation fan. An alternate embodiment is described for use by animal handlers in min-vans and the like.

Classifications:

International (IPC 8-9): A01K1/02 (Advanced/Invention)

International (IPC 1-7): A01K1/00 A01K1/03

CPC: A01K1/0236 A01K1/0245

European: A01K1/02D A01K1/02D1

US: 119/482 119/496

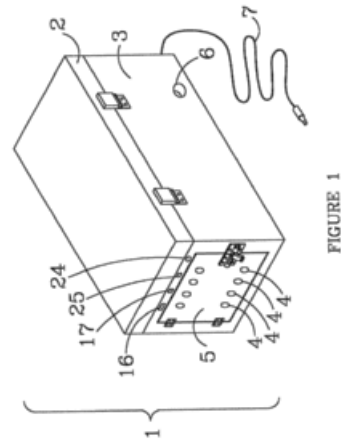


FIGURE 1

Family:

Publication number	Publication date	Application number	Application date
US2002023594 AA	20020228	US20010929747	20010814
US6490995 BB	20021210	US20010929747	20010814

Priority:

US20000228383P 20000828 US20010929747 20010814

Probable Assignee: GREENE JR GEORGE JEFFERSON**Assignee(s):** GREENE GEORGE JEFFERSON ; GREENE JR GEORGE JEFFERSON**Inventor(s):** (std): GREENE GEORGE JEFFERSON ; GREENE JR GEORGE JEFFERSON**17) Family number: 30350056** (US2004044336A)

© PatBase

Title: CONDUCTIVE INTERSTITIAL THERMAL THERAPY DEVICE

Abstract: An apparatus and method for thermally destroying tumors in which heat is generated by electrical resistance heating conducted to the target tissue. Computerized scanning is used to optimize the geometry of a thermal probe. The probe has a thermally conductive tip containing an electrical resistance heating element. The thermally conductive tip is mounted on the end of a fiber that contains the electrical power leads and other electrical leads connecting to monitoring devices associated with the tip. The tip is coated with a thin layer of biocompatible ceramic to avoid coagulated tissue sticking to the tip. The tip has one or more thin, thermally-conductive elements which deploy in stages to coagulate the tumor. The conductive elements may be thin wires or blades. On one embodiment, the conductive elements are composed of a shape memory material that is folded against the tip at lower temperatures and deploys at selected higher temperatures. In another embodiment, the conductive elements are blades that are deployed mechanically. The tip may be provided with a miniature thermocouple to provide temperature feedback information. The resistance heating element may be pyrolytic graphite.

Classifications:

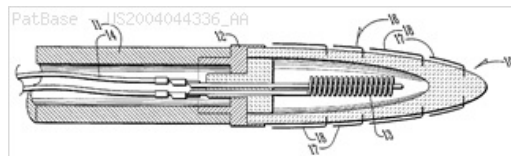
International (IPC 8-9): A61B18/04 A61B18/08 A61B18/14 A61B18/18 A61B18/20 A61B18/24 B65B51/14 B65B9/02 (Advanced/Invention); A61B17/00 A61B18/00 (Advanced/Non-invention); A61B18/04 A61B18/18 B65B51/14 B65B9/00 (Core/Invention); A61B17/00 (Core/Non-invention); A61F (Subclass/Invention)

International (IPC 1-7): A61B18/04 A61B18/18 A61F

CPC: B65B9/026 A61B2017/00084 A61B2017/00101 A61B2017/00867 A61B2018/00011 A61B18/20 A61B2018/00577 A61B2018/00714 A61B2018/00791 A61B2018/2005 A61B18/082 A61B18/24

European: A61B18/08B A61B18/24 B65B9/02C K61B17/00C1T K61B17/00C1T6 K61B17/00S12 K61B18/00A2 K61B18/08B

US: 53/374.8 53/450 53/450P 53/477 53/545 53/545S 53/553 606/10 606/13 606/15 606/28 606/28P 606/29 606/31 606/41

**Family:**

Publication number	Publication date	Application number	Application date
AU2003293153 AA	20040319	AU20030293153	20030627
US2004044336 AA	20040304	US20020228482	20020827
US2004044337 AA	20040304	US20030336973	20030106
US2005119645 AA	20050602	US20050028157	20050103
US2006167445 AA	20060727	US20060373710	20060310
US2008229715 AA	20080925	US20080133524	20080605

US2010318077 AA	20101216	US20100806561	20100816
US2014378956 AA	20141225	US20140482382	20140910
US6780177 BB	20040824	US20020228482	20020827
US6872203 BB	20050329	US20030336973	20030106
US7361173 BB	20080422	US20050028157	20050103
US7383676 BA	20080610	US20060372710	20060310
US8858545 BB	20141014	US20100806561	20100816
WO04019809 A2	20040311	WO2003US20474	20030627
WO04019809 A3	20090716	WO2003US20474	20030627
WO07106263 A2	20070920	WO2007US03426	20070208
WO07106263 A3	20071227	WO2007US03426	20070208

Priority:

US20020228482	20020827	US20030336973	20030106	WO2003US20474	20030627
US20050028157	20050103	US20050660456P	20050310	US20050708033P	20050812
US20060372710	20060310	US20060373710	20060310	US20080133524	20080605
US20100806561	20100816	US20140482382	20140910		

Probable Assignee: BIOVENTURES LLC

Assignee(s): (std): SHAFIRSTEIN GAL ; FERGUSON SCOTT L ; TRUSTEES OF UNIV OF ; ARKANSAS CHILDREN S HOSPITAL RES INST INC ; ATLANTA ATTACHMENT CO ; UNIV ARKANSAS ; WANER MILTON

Assignee(s): ATLANTA ATTACHMENT COMPANY ; BIOVENTURES LLC ; ARKANSAS CHILDREN S HOSPITAL RESEARCH INST INC ; TRUSTEES OF UNIV ; BOARD OF TRUSTEES OF UNIV ARKANSAS ; BOARD OF TRUSTEES OF UNIV OF ARKANSAS ; BOARD OF TRUSTEES OF UNIVERSITY ; BOARD OF TRUSTEES OF UNIV ; BOARD OF TRUSTEES OF THE UNIVERSITY OF ARKANSAS

Inventor(s): (std): SHAFIRSTEIN GAL ; FERGUSON SCOTT L ; WANER MILTON ; SCHMIDT LEE ; DASHER PRESTON B ; PRICE ELVIN C ; OLEWICZ TADEUSZ

Inventor(s): FERGUSON SCOTT ; GAL SHAFIRSTEIN ; SCOTT L FERGUSON ; MILTON WANER

Agent(s): WRIGHT LINDSEY AND JENNINGS LLP; WOMBLE CARLYLE SANDRIDGE AND RICE PLLC; RAY F; COX JR RAY F; RICHARD BLAKELY

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

18) Family number: 41933060 (US2008144944A)

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Title: NEURAL NETWORK SYSTEMS FOR VEHICLES

Abstract: Method for obtaining information about an occupying item in a space in a vehicle in accordance with the invention includes obtaining images of an area above a seat in the vehicle in which the occupying item is situated and classifying the occupying item by inputting signals derived from the images into a trained neural network form which is trained to output an indication of the class of occupying item from one of a predetermined number of possible classes. The method is applicable for various vehicles including automobiles, trucks, buses, airplanes and boats. The images may be pre-processed to remove background portions of the images and then converted into signals for input into the neural network form.

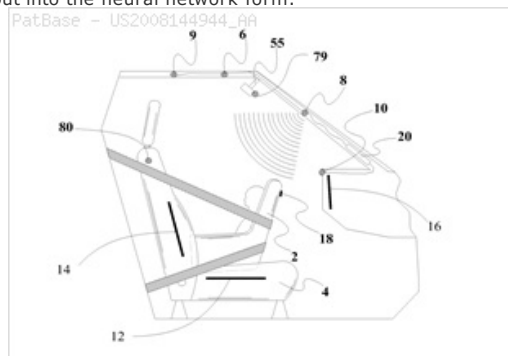
Classifications:

International (IPC 8-9): G06K9/00 G06K9/62 (Advanced/Invention); G06K9/62 (Core/Invention)

CPC: G06K9/00369 G06K9/00832

European: G06K9/00H1 G06K9/00V7

US: 382/100 382/103 382/104 382/224 382/224P 382/312



Family:

Publication number	Publication date	Application number	Application date
US2008144944 AA	20080619	US20080039427	20080228
US7660437 BB	20100209	US20080039427	20080228

Priority:

US19920878571	19920505	US19930040978	19930331	US19940239978	19940509
US19950474786	19950607	US19950474783	19950607	US19950505036	19950721
US19960640068	19960430	US19970798029	19970206	US19970905876	19970804
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US20030365129	20030212	US20030733957	20031211	US20040895121	20040721
US20080039427	20080228				

Probable Assignee: AMERICAN VEHICULAR SCIENCES LLC

Assignee(s): (std): AUTOMOTIVE TECH INT

Assignee(s): AUTOMOTIVE TECHNOLOGIES INT ; AUTOMOTIVE TECHNOLOGIES INT INC ; AUTOMOTIVE TECHNOLOGIES INTERNATIONAL INC ; AMERICAN VEHICULAR SCIENCES LLC

Inventor(s): (std): BREED DAVID S

Agent(s): BRIAN ROFFE ESQ; BRIAN

19) Family number: 52367068 (US2012289757A)

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Title: METHOD, DEVICE AND SYSTEM FOR MODULATING AN ACTIVITY OF BROWN ADIPOSE TISSUE IN A VERTEBRATE SUBJECT

Abstract: Devices, systems, and methods are disclosed herein for treatment of a disease, disorder, or condition in a vertebrate subject. A device is provided that includes one or more cooling elements configured to be applied to one or more tissues of a vertebrate subject to modulate at least one activity of brown adipose tissue of the vertebrate subject, wherein at least a portion of the one or more cooling elements is configured to be implantable, and a programmable controller configured to provide instructions to the one or more cooling elements in response to information regarding one or more physiological conditions of the vertebrate subject.

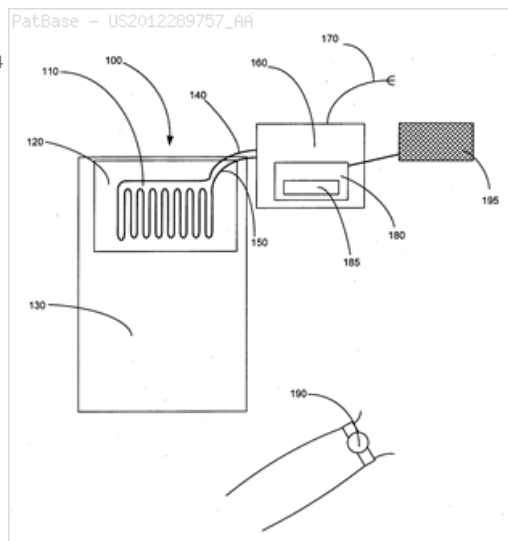
Classifications:

International (IPC 8-9): A61F7/00 A61F7/02 A61F7/10 A61F7/12
A61M35/00 A61N1/00 A61N1/05 A61N1/36 A61N2/00 A61N5/02 A61N5/04
A61N7/00 (Advanced/Invention);
A61F7/00 A61F7/02 A61F7/10 A61N1/36 A61N5/04 (Advanced/Non-invention)

CPC: A61F2007/0011 A61F7/02 A61N1/3606 A61N1/36014 A61N1/36053
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A61F2007/0226 A61F2007/0233 A61N2007/0008 A61F7/106 A61F7/12
A61F2007/0002 A61F2007/0056 A61F2007/0075 A61F2007/009
A61F2007/0093 A61F2007/029 A61F2007/101 A61F2007/126 A61N1/0534
A61N1/3605 A61N5/025 A61N5/04 A61N1/36

European: A61N5/02C16 K61N5/04

US: 1/1 600/1 600/2 600/9 601/2 604/291 607/104 607/105 607/106
607/108 607/113 607/3 607/96



Family:

Publication number	Publication date	Application number	Application date
DE602012045373 D1	20180517	DE201260045373T	20120509
EP2707082 A1	20140319	EP20120781678	20120509
EP2707082 A4	20141105	EP20120781678	20120509
EP2707082 B1	20180418	EP20120781678	20120509
US2012289757 AA	20121115	US20110068422	20110509
US2012289758 AA	20121115	US20110199577	20110901
US2012289761 AA	20121115	US20110199581	20110901
US2012289763 AA	20121115	US20110068420	20110509
US2012290023 AA	20121115	US20110068421	20110509
US2012290051 AA	20121115	US20110199566	20110901
US2017231812 AA	20170817	US20170586861	20170504
US8690934 BB	20140408	US20110068420	20110509
US8968377 BB	20150303	US20110068421	20110509
US9011510 BB	20150421	US20110068422	20110509
US9238133 BB	20160119	US20110199566	20110901
US9433775 BB	20160906	US20110199581	20110901
US9656056 BB	20170523	US20110199577	20110901
WO12154787 A1	20121115	WO2012US37027	20120509

Priority:

US20110068420	20110509	US20110068422	20110509	US20110068421	20110509
US20110199577	20110901	US20110199566	20110901	US20110199581	20110901
EP20120781678	20120509	WO2012US37027	20120509	US20170586861	20170504

Probable Assignee: GEARBOX LLC

Assignee(s): (std): HYDE RODERICK A ; INVENTION SCIENCE FUND I LLC ; SEARETE LLC ; ISHIKAWA MURIEL Y ; SWEENEY ELIZABETH A ; WOOD JR LOWELL L ; MALASKA STEPHEN L ; LEUTHARDT ERIC C ; JUNG EDWARD K Y ; BOYDEN EDWARD S ; GEARBOX LLC

Assignee(s): GEARBOX LLC BELLEVUE ; SEARETE LLC A LIABILITY OF STATE OF DELAWARE CORP LTD ; JUNG EDWARD

KY

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

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Title: Mattress assembly with semiconductor thermo-control

Abstract: A mattress assembly includes a mattress having a network of grooves at the top covered within a soft covering layer, a control box, a water piping arranged within the network of grooves and connected to hot and cold water reservoirs inside the control box, the control box having a semiconductor chip controlled by a control circuit to heat the hot water reservoir and to cool the cold water reservoir, and hot and cold water pumps respectively controlled by the control circuit to send water from the hot or cold water reservoir to the water piping in regulating the temperature of the mattress.

Classifications:

International (IPC 8-9): A47C21/04 (Advanced/Invention);

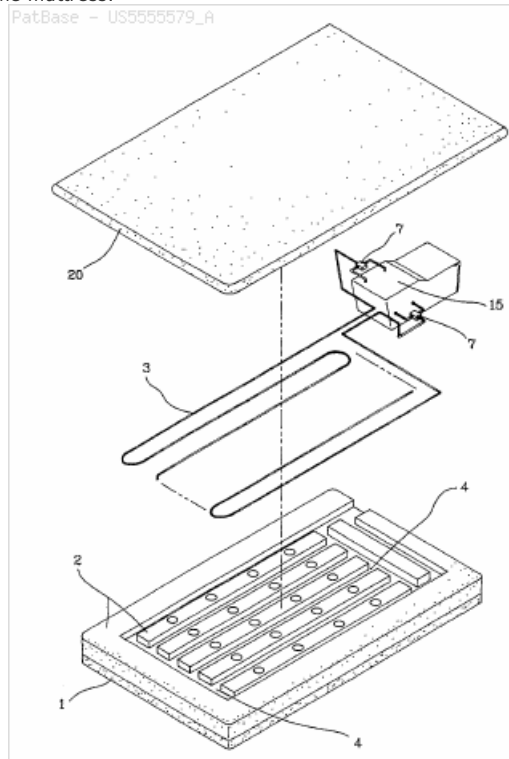
A47C21/00 (Core/Invention)

International (IPC 1-7): A47C21/4

CPC: A47C21/044 A47C21/048

European: A47C21/04B2 A47C21/04H

US: 165/46 5/284 5/421



Family:

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