

PatentAlert 06-2010  
**Bedding**

**US20100115704 - HIGH COMFORT MATTRESSES HAVING FIBERBALLS**

DENVER MATTRESS CO LLC

Published 2010-05-13

Priority date 2009-11-16 (US)

In one embodiment, a mattress is constructed of a core having a first side and a second side. A padding layer is positioned at the first side of the core and has a contoured surface and a planar surface. A layer of individual fiberballs is disposed on the planar surface of the padding layer.

**US20100071135 - PILLOW WITH BUFFERING EFFECT**

HSU JUNIOR JULIAN (US) (Inventor)

Published 2010-03-25

Priority date 2008-09-19 (US)

A pillow includes an outer enclosure; an inner enclosure being received inside the outer enclosure and provided with an air valve; a fibrous material consisting of a plurality of fibers being filled in a space between the outer enclosure and the inner enclosure; and a core being received inside the inner enclosure. The fibers of the fibrous material function like a cushion, and the tiny air spaces existed among the fibers allow the pillow to provide a buffering effect, so that a user lying on back or on side can always comfortably rest his or her head on the pillow to enjoy good sleep quality.

**US20090249547 - BEDDING SYSTEM AND METHOD FOR ACCOMMODATING PERSONAL TEMPERATURE COMFORT DIFFERENCES**

LEE NIKKI (US) (Inventor)

Published 2009-10-08

Priority date 2009-04-06 (US)

A comforter is provided having a length and width dimension larger than commercially available comforters. A flexible slidable fastener is provided along the length of the comforter substantially in the middle of the width dimension of the comforter. The flexible slidable fastener may be covered to prevent irritation to the occupants of the bed on which the comforter of the present invention is placed.

**US20090250069 - MIGRAINE HEADACHE RELIEF PILLOW**

FREY STEVEN J (US) (Inventor)

Published 2009-10-08

Priority date 2009-04-04 (US)

A pillow that provides relief from migraine headaches and is comfortable enough to allow for sleep. Within the structure of a soft pillow, is a spherical, hemispherical or conical shaped nodule, which is harder than the surrounding pillow. While the pillow provides support for the head to facilitate sleeping, the nodule provides passive and constant pressure to a single point of contact on the head.

**WO200993987 - ANTI STATIC MATTRESS THAT HAS THE CAPABILITY OF SHIELDING ELECTROMAGNETIC WAVES**

ISTIKBAL MOBILYA SANAYI VE TIC

Published 2009-07-30

Priority date 2008-01-21 (TR)

This invention is about an anti static mattress that has a static grounding unit, which is made of a fabric that has the property of electromagnetic wave shielding. The anti static mattress that is the subject of the invention has fabric that has electromagnetic wave shielding property, at least one male snap fastener which is connected to the conductive metal net structure, a static grounding cable, a female snap fastener soldered to the end of the static grounding cable, and the static grounding cable has a plug that is connected to the static grounding line or a conductive sphere that is in contact with the wall.

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#### **WO200991345 - MATTRESS AND HOME TEXTILE PRODUCTS HAVING THE CAPABILITY OF SHIELDING ELECTROMAGNETIC WAVES**

*ISTIKBAL MOBILYA SANAYI VE TIC*

Published 2009-07-23

Priority date 2008-01-18 (TR)

This invention is comprised of a mattress, a comforter, and a pillow made of a fabric that has the property of decreasing electromagnetic field effect. The conductivity, electromagnetic field shielding capability, softness and other properties (thermal balance, delayed inflammability, etc. ) of the fabric that is used to cover the home textile products which are the subject of the invention are supplied to the home textile products mentioned. With this innovation, an environment that provides protection against electromagnetic field effects, and hence a healthy and comfortable sleep environment is provided.

#### **US20090172881 - MATTRESS WRAP BEDDING SYSTEM**

*PETERSON MARLENE MARIAN (US) (Inventor)*

Published 2009-07-09

Priority date 2009-02-24 (US)

The Mattress Wrap Bedding System holds bedding in place over deep mattresses. Standard-sized mattresses are accommodated including twin, full, queen, eastern king and California king. Easy changing of the bed clothes is achieved for deep heavy mattresses. Mattresses using this system can be on box springs, other foundations, platform beds, futon beds, and other flat surfaces such as steel bed platforms in truck cabs. Mattress wrap bedding includes four major components. Bedding is designed to be connected to ribbons on the mattress sides. Adjustable ribbons connect the bedding to an anchor. Bedding anchors include under-mattress, mattress cover, mattress, bed frame, and platform bed anchors. Connectors and fasteners make up the fourth major component. A smooth outer appearance is achieved for the bedding ensemble so that bulges do not appear under blankets, coverlets, quilts and comforters. Mattress wrap bedding includes bottom sheets, mattress pads, other mattress toppers, and top sheets also.

#### **WO2009131268 - A WATER MATTRESS**

*LOHAS YEONJEONG BEDDING CO LTD*

Published 2009-10-29

Priority date 2008-04-23 (KR)

The present invention includes; a mattress cover wherein a water storage space is formed inside; anti-expansion bases which prevent expansion of said mattress cover caused by an excessive water injection and cancel water fluctuations; and active-carbon-fiber heating wires radiating far infrared rays. And it provides a water mattress that reduces a body fatigue, enables a sound sleep, and guarantees a comfortable sleeping place by charging anti-floating soft materials which reduce water noises and water fluctuations and refract and reflect far infrared rays radiating from said active-carbon-fiber heating wires.

#### **DE102007059274 - MATTRESS PAD FOR USE IN E.G. CLINIC, HAS UPPER SURFACES MADE OF YARNS WITH ANTIMICROBIAL FUNCTION, WHERE PAD CONSISTS OF SPACER FABRICS, THREE DIMENSIONAL FABRIC OR SPACER KNITTED FABRICS AND EXHIBITS SPECIFIC MINIMUM MATERIAL THICKNESS**

*STANKE KLAUS (DE) (Inventor)*

Published 2009-06-10

Priority date 2007-12-08 (DE)

The pad has two upper surfaces made of yarns with permanent antimicrobial function such as trevira bioactive, where the pad consists of spacer fabrics, three dimensional fabrics or spacer knitted fabrics with medical and hygienic function and exhibits minimum material thickness of about 1.5 centimeter. One of upper surfaces is provided with a fluid barrier. A cover is provided with same functional characteristics as the pad. Sides of the pad are sealed in a cleaned manner by end contour manufacturing method.

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#### **US7536740 - RESTING MATTRESS**

SWARTZ JANN E (US) (*Inventor*)

Published 2009-05-26

Priority date 2008-04-12 (US)

An inflatable resting mattress designed for indoor and outdoor use, which allows a user to support his head within a facial aperture while lying in a prone position. The facial aperture includes several breathing tubes designed to allow a user to maintain normal breathing. Three support pillows are provided for a user to place under his head, lumbar and legs to support proper spine alignment while lying in a prone position. These pillows are adapted to secure to the body mat to prevent slippage.

#### **DE102007054256 - BED COVER, FOR USE E.G. IN HOTELS, CONSISTS OF AT LEAST TWO TEXTILE SHEETS AND COVERS MATTRESS AND PILLOWS AND EXTENDS OVER EDGES OF BED**

SCHMITT THOMAS (DE) (*Inventor*)

Published 2009-05-20

Priority date 2007-11-14 (DE)

The bed cover consists of at least two textile sheets. It covers the mattress and pillows and extends over the edges of the bed.

#### **US20090083908 - ANTIBACTERIAL AND ANTI-DUSTMITE PILLOWS AND PILLOW ENCASINGS**

NATIONAL ALLERGY SUPPLY, INC.

Published 2009-04-02

Priority date 2007-01-04 (US)

Hygienic, antibacterial, and anti-allergenic pillows or pillow encasings with a covering are disclosed. The covering comprises a fabric coated with a monolithic coating and a filter. The monolithic coating prevents moisture from entering the pillow and allergens from leaving the pillow or pillow encasing. The filter is operative to allow air to egress and ingress the pillow covering.

#### **WO200933068 - SUPPORT PILLOW FOR PREGNANT WOMAN**

JAMSHIDI ANITA (US) (*Inventor*)

Published 2009-03-12

Priority date 2007-09-06 (US)

An improved support for use by a pregnant woman to achieve greater comfort while resting or sleeping in a prone position. The support comprises two pillows connected together by a piece of stretchable fabric. The pillows are shaped to provide greater comfort to the woman, especially over long periods of time, compared to prior designs that employ rounded pillows. Different types of foam are used for the two pillows to tailor the degree of support for the part of the woman's body that is being supported by each pillow. The stretchable fabric enables the support to adapt to the growth of the woman during pregnancy (particularly late term pregnancy). The support may be assembled into a compact, attractive unit for storage.

#### **WO2009140885 - CERVICAL VERTEBRAE HEALTH SLEEPING PILLOW**

CHEN HAI (CN) (*Inventor*)

Published 2009-11-26

Priority date 2008-05-19 (CN)

A cervical vertebrae health sleeping pillow is provided. The pillow comprises side lying neck cushions at both sides' position and a back lying neck cushion at middle position and corresponding side lying head cushions and back lying head cushion. The side lying neck cushions and the back lying neck cushion are jointly composed of two supporting packages and a depending package overlapping on two supporting packages. A piece of bottom cloth is set on the bottom of two supporting packages and they are fixed on the bottom cloth. Both sides of the depending package are respectively connected with one supporting package. A separation angle is formed between the back lying neck cushion and the side lying neck cushions. The depending package is filled with stuffing. The supporting packages and the head pillow are filled with stuffing or directly made from foam material.

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#### **US20090056030 - MATTRESS COVER FOR CONVALESCING PATIENT**

IPM, LLC

Published 2009-03-05

Priority date 2007-09-04 (US)

There is provided an inflatable mattress and coverlet used to reduce and treat decubitus ulcers. The mattress is an air inflatable mattress and is particularly adapted for use on a bed in a hospital, nursing home, health care facility or the like. The air inflatable mattress has a series of apertures on the top allowing small amounts of air to pass through to the underside of the coverlet. According to one aspect of the invention the coverlet is placed over the top of air inflatable mattress in the central portion thereof between the head of the bed and the foot of the bed. The coverlet is of sufficient length to extend under the weight bearing portions of the patient. The coverlet has as a first layer a moisture wicking fabric, such as a polyester, and on one side of the moisture wicking fabric there is attached a microporous polymeric member which allows air from the mattress to pass through the coverlet to the patient. Adjacent the polymeric member is another layer comprising a spacer fabric. The side edges of the coverlet form a drip edge and may be attached to the mattress by suitable means.

#### **WO200918669 - IMPROVED MICROBEAD PILLOW**

SNOOZTIME INC

Published 2009-02-12

Priority date 2007-08-03 (US)

An improved microbead pillow which provides consistent therapeutic support, is manufactured of hypoallergenic materials, is fully machine washable and dryable, and is fully adjustable in height and firmness without the addition or removal of filling material. The pillow may be in a variety of shapes and sizes. In one embodiment, the pillow comprises a microbead-microfibre complex filling in which the microbeads are treated with an antistatic coating, a pillow cover to encase the filling material, and a removable pillowcase. The pillow may include pillow adjustment means associated either with the pillow cover or with a removable pillowcase for adjusting the height and firmness of the pillow.

#### **NL1035115 - LAYER OF POLYMER FOAM IS APPLIED TO TEXTILE OR OTHER UNDERLAY TO IMPART ANTISLIP PROPERTY, ENABLING IT TO REMAIN IN PLACE DESPITE OTHER TREATMENT TO WHICH IT IS SUBJECTED AND IS PARTICULARLY APPLICABLE TO MATTRESSES**

GROOTSWAGERS JOHANNES CORNELIUS (NL) (Inventor)

Published 2008-03-21

Priority date 2008-03-03 (NL)

The layer of polymer foam is applied to textile or other underlay to impart antislip property, enabling it to remain in place, despite other treatment to which it is subjected. It is particularly applicable to mattresses. In particular, a physical loading is avoided for elderly people and those physically handicapped, in that their mattress or other objects remain in their correct position.

#### **US7434281 - PILLOW HAVING ANTI-WRINKLING PROPERTIES**

I CARE SLEEP, LLC

Published 2008-10-14

Priority date 2007-09-28 (US)

A pillow for supporting the head of a user during sleeping includes a main body formed of a resiliently compressible foam material in a generally rectangular configuration having opposite ends with opposed upper and lower surfaces extending between the opposite ends. The lower surface is configured to overlie stably on a sleeping platform, and the upper surface is formed with beveled indentations adjacent the opposite ends of the main body and with a convex contour extending lengthwise between the beveled indentations presenting a generally central crown area and inclined facial support areas respectively sloping downwardly away from the crown area toward the beveled indentations. Each facial support area is adapted to impart a pulling effect on the facial skin of a user when lying thereon in a downwardly sloping orientation with a cheek of the user's face on the facial support area and the user's face facing the adjacent beveled indentation.

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#### **FR2917956 - FITTED SHEET AND QUILT COVER FIXING DEVICE FOR E.G. TEXTILE INDUSTRY, HAS FITTED SHEET FIXED TO QUILT COVER BY PERMANENT STITCHING REALIZED BY SIZE OF FEET OF USER BETWEEN TWO CORNERS ALONG ENTIRE LENGTH OF MATTRESS**

*KACZMAREK FRANCOISE (FR) (Inventor)*

Published 2009-01-02

Priority date 2007-06-27 (FR)

The device has a fitted sheet fixed to a quilt cover by permanent stitching realized by a size of feet of a user between two corners along entire length of mattress. The cover has a cut disengaging a fabric scallop along entire width of the mattress, where the scallop is fixed to the sheet. The scallop and the cut form an insertion and a removal opening that is utilized for inserting and removing the quilt.

#### **US20080307583 - FOAM WITH GREEN TEA ADDITIVE FOR FOAM MATTRESSES, PILLOWS AND CUSHIONS**

*ZINUS INC.*

Published 2008-12-18

Priority date 2007-06-18 (CN)

A method of making foam imparts antimicrobial and antiodorant qualities to the foam. Green tea powder is added to the polyol raw materials for making memory foam. The green tea memory foam is used to make pillows, cushions and mattresses. Green tea foam in the top layer of a mattress acts as an antiodorant such that less of the chemical smell of the memory foam is perceived by the user. In addition, the bacteria and mold that would otherwise develop in the moist warmer sleeping environment on memory foam are killed by the green tea additive to the foam. Measurable antimicrobial and antiodorant qualities in the green tea foam are achievable by adding green tea powder constituting less than 2% of the weight of the resulting green tea foam.

#### **WO2008154605 - TREATED BEDDING COVER**

*DREAM EZZZ INTERNATIONAL LLC*

Published 2008-12-18

Priority date 2007-06-11 (US)

A bedding cover treated with an anti-pest chemical. The cover repels or kills bedbugs, dust mites, ticks, fleas, and other pests for use in bedrooms, hotels, motels, pet beds, and the like. The cover is preferably waterproof and disposable.

#### **EP1955617 - DOMED COMFORTER**

*PACIFIC COAST FEATHER COMPANY*

Published 2008-08-13

Priority date 2007-02-09 (US)

The comforter includes a core portion which includes upper and lower fabric layers with lines of stitching connecting the upper and lower fabric layers and filling within the volumes of the core portion defined thereby. Border portions are attached to the head and foot ends of the core portion, wherein the top edge of the core portion is gathered and the head border portion sewn thereto. The width of the top edge of the core portion is approximately 20-75% wider ungathered than when gathered and sewn to the head border portion. The lower edge of the core portion is approximately 0-50% wider ungathered than when gathered and sewn to the foot border portion. Side border portions are secured to the sides of the core portion and to the opposing ends of the head and foot border portions.

#### **WO200891455 - BEDDING OR SEATING PRODUCT HAVING INFLATABLE CONCENTRIC AIR BLADDERS**

*L & P PROPERTY MANAGEMENT CO*

Published 2008-07-31

Priority date 2007-01-22 (US)

A set of inflatable, tubular, and concentric tubes or air bladders are placed in a bedding or seating product and adjusted to meet the preferences of a user. The tubes are arranged concentrically with the innermost tube defining an aperture at the center of the product. The tubes are connected to air supply hoses that are inflated through activation of an electronically controlled air pump. The flow may be controlled by solenoid or other valves. The user via a remote may control the inflation of one or more of the tubes to provide the optimum level of comfort to the user.

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#### **EP1946679 - MATTRESS AND UPHOLSTERY COVERS**

CONTINENTAL TICKING GMBH

Published 2008-07-23

Priority date 2007-01-18 (GB)

A cover for a mattress, cushion or similar upholstery item, comprises a cover panel having a central area of relatively inelastic material and a peripheral area of relatively elastic material. Thus conventional panel fabrics can be combined with elastic material such that the feel of the cover can be maintained whilst the panel can deflect in use to enhance comfort and can be kept taut and wrinkle-free when unused. A skirt of the cover has a higher elastic modulus relative to the cover panel elastic areas. This provides an "anchorage" against which the elastic and the interconnected relatively inelastic areas of the cover panel may be maintained in tension.

#### **WO200871065 - PILLOW FOR PROTECTING NECK**

CHEN HAI (CN) (*Inventor*)

Published 2008-06-19

Priority date 2006-12-14 (CN)

A pillow for protecting neck includes a headrest and a neckrest. The neckrest is composed of at least two support packages and a depending package overlapping on the support packages, and the both sides of said depending package are respectively connected with one support package. The filling material is filled in the headrest, or the headrest is directly formed of emulsion etc. The filling material is filled in the support packages and the depending package of the neckrest.

#### **EP1920681 - INFLATABLE BED HAVING A BUILD-IN ELECTRIC AIR PUMP UNIT FOR INFLATING A MATTRESS ASSEMBLY**

WANG CHENG-CHUNG (TW); WANG KENNETH (TW) (*Inventors*)

Published 2008-05-14

Priority date 2006-11-10 (CN)

An inflatable bed includes a bedstead assembly, a mattress assembly having at least one air chamber, and an electric air pump unit disposed on the bedstead assembly. The air pump unit includes a centrifugal pump device for performing initial inflation of the air chamber, a diaphragm pump device for performing subsequent inflation of the air chamber, and a control valve operable to allow for and interrupt fluid communication between the centrifugal pump device and the air chamber.

#### **US20080104752 - SPECIAL FABRICATION OF DUVET COVERS, PILLOWCASES, SHAMS, AND COMFORTERS**

BELFER SEMEN (US) (*Inventor*)

Published 2008-05-08

Priority date 2006-11-06 (US)

An exemplary method for fabricating duvets, shams, or pillowcases comprises: providing first squared fabric leftover pieces of a first color; providing second squared fabric leftover pieces of a second contrasting color equal to the first pieces; stitching together the leftover pieces arranged in a checker pattern, wherein each first square is adjacent to second squares and vice-versa, forming a top and a bottom joint sheets substantially equal and rectangular, both having two longitudinal sides and transversal sides; superimposing the top sheet on the bottom sheet, stitching them together along the longitudinal sides and one transversal side by a sewing machine, thereby coupling them. A comforter can be made of one top joint sheet (produced by the above method), one heat insulation layer, and one regular bottom sheet. A method modification includes arranging a joint sheet from strips; wherein each strip differs from its adjacent strip or strips by contrasting colors.

#### **US20080066237 - ANTI-MICROBIAL MATTRESS AND IMPROVED SUPPORT CORE**

BOYD FLOTATION INC

Published 2008-03-20

Priority date 2006-09-19 (US)

A mattress includes a liquid impermeable layer and at least one anti-microbial layer. A support core with expanded polystyrene beads is also disclosed.

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#### **EP2019911 - PULMONARY MATTRESS**

*HILL ROM SERVICES INC*

Published 2009-02-04

Priority date 2007-05-08 (WO)

A patient-support apparatus includes a mattress assembly supported on a frame, the mattress assembly including a coverlet configured to provide low-airloss therapy to a patient supported on the patient-support apparatus. The patient-support apparatus is articulable to a number of positions and includes a control network which is responsive to movement of portions of the frame to alter operational parameters of the frame and mattress assembly.

#### **US20070251017 - INSTITUTIONAL MATTRESS**

*FERGUSON SAFETY PRODUCTS*

Published 2007-11-01

Priority date 2006-04-28 (US)

An institutional mattress includes a resilient core and a mattress covering sealing the core. The mattress covering has a ticking with a base fabric made of yarns with a denier value of at least 500 and has a thread count of at least 18 threads per inch in both warp and fill. The ticking is bonded to a fluid proof material having an anti-microbial agent. The core may be fire resistant polymeric foam and the ticking base fabric may be 1050 denier "ballistic" nylon. The ticking base fabric may be coated with urethane having at least one of a flame retardant and an anti-microbial, and then laminated with a polyurethane film. Alternatively, the ticking base fabric may be treated with a flame retardant covered with a fluid proof material. The mattress covering may be sealed around the core with stitching.

#### **US20070254549 - SURFACE LAYER OF AN AIRBED OR AIR MATTRESS**

*BESTWAY INFLATABLES & MATERIAL CORP.*

Published 2007-11-01

Priority date 2006-04-28 (CN)

A surface layer of an airbed or air mattress comprises a main layer, a reinforced layer, and an outer layer. The surface of the main layer is adhered together with the under-surface of the reinforced layer using an adhesive layer. The main layer is an inner layer of the airbed or air mattress. The reinforced layer is sandwiched between the inner layer and outer layer. The outer layer is a flocked layer adhered to the reinforced layer.

#### **EP2007256 - MATTRESS OR MATTRESS PAD WITH GEL SECTION**

*DREAMWELL LTD*

Published 2008-12-31

Priority date 2007-04-03 (WO)

The invention generally relates to a mattress or a mattress pad with one or more gel sections. The gel section may provide improved support and comfort at a localized area of a mattress or a mattress pad.

#### **EP1978847 - PRESSURE REDUCTION HEALTHCARE MATTRESS SYSTEM**

*BG IND LLC*

Published 2008-10-15

Priority date 2007-01-31 (WO)

A foam core for a pressure reduction healthcare mattress is disclosed. It includes a top layer made of memory retention foam, a middle layer made of foam and having a convex shape that is higher along a longitudinal center line than along the two sides, and a lower support layer made of foam. The top layer is made of a torso piece and a softer foot/lower leg piece. The middle layer includes a heel pillow that fits into a heel pillow cavity in the foam, the heel pillow including layers of fiber material over a crown shaped foam insert. The lower support layer has a sloped portion in a lower leg section that slopes down toward a heel end of the foam core. Also disclosed is a pressure reduction healthcare mattress that includes the foam core and a cover.

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**FR2896138 - COMFORTER E.G. DUVET, HAS UPPER SURFACE ON WHICH SUPPORT TYPE ELEMENT COMPRISING AESTHETIC PATTERN IS FIXED USING FIXATION UNIT THAT PERMITS SUPPORT TYPE ELEMENT TO BE REMOVED FROM COMFORTER**

ABEIL SA

Published 2007-07-20

Priority date 2006-01-18 (FR)

The comforter has an upper surface on which a support type element is fixed using a fixation unit such as snap fastener. The support type element partially covers the comforter and has an aesthetic pattern which is chosen among work of art, combined pattern, complex pattern and personal photo. The fixation unit permits the support type element to be removed from the comforter.

**FR2895890 - MATTRESS WITH CONTROLLABLE AIR PERMEABILITY AND HIGH USER COMFORT, COMPRISES SUPERPOSED POLYMER LAYERS, PREFERABLY ELASTIC AND VISCOELASTIC LAYERS, BONDED WITHOUT ADHESIVE AND AIR-PERMEABLE INSERTS**

NEW WIND

Published 2007-07-13

Priority date 2006-01-09 (FR)

A mattress consists of at least two superposed, at least partially polymeric layers (EL, VEL), bonded naturally (i. e. without adhesive) to each other by physical, physicochemical or chemical forces. At least one insert (6) is located in the mass of the mattress, and is of air-permeable material having rigidity equal to, less than or higher than that of the surrounding layer(s) (EL) and/or (VEL). Independent claims are included for: (1) the production of the mattress, with inserts in the mass and breathing cavities, by: (a) placing wedges, of suitable shape to be easily demolded and to form the cavities in a layer (EL) and/or (VEL) and of suitable height to form the inserts, in the base of a mold; (b) placing geometrical shapes corresponding to the inserts, extending the whole width of the mold to allow extraction (or at least half of the width to obtain a mattress with different properties from right to left); (c) (i) rapidly pouring a mixture of polyurethane-forming reactants (generally an exothermically reacting polyol-isocyanate mixture) into the base of the mold, to surround the wedges and part of the shapes and up to a height corresponding to the position of the interface (9) and (ii) pouring a reactive mass, or a polymer or latex mass, above the obtained interface, or applying a preformed layer; (d) rapidly placing a lid on the mold and allowing reaction to take place; (e) demolding the obtained mattress containing the cavities and internal shapes (the wedges remaining in the mold or being extracted manually); and (f) extracting the shapes and replacing them with the inserts; and (2) the molds containing inserts as above, specifically in the form of cones, tubes, thin plates or groups of mini-tubes.

**FR2895656 - REMOVABLE PROTECTOR FOR MATTRESS OF BED, HAS UPPER, LOWER AND INTERMEDIATE LAYERS THAT ARE MADE OF HYDROPHILIC MATERIALS WITH BODILY FLUID RETAINING PROPERTY, AND ALLOWS WASHING IN STANDARD DOMESTIC WASHING MACHINE**

CIE CONTINENTALE SIMMONS

Published 2007-07-06

Priority date 2006-01-04 (FR)

The protector is comprised of upper, lower and intermediates layers that are made of hydrophilic materials with bodily fluid retaining property, and allows washing in a standard domestic washing machine at 60 degree centigrade temperature. A fixing unit is provided at the periphery of the protector, and engages the attachment unit adhered to a mattress, such that the protector is attached to the mattress. The protector is comprised of upper, lower and intermediates layers that are made of hydrophilic materials with bodily fluid retaining property, and allows washing in a standard domestic washing machine at 60 degree centigrade temperature. A fixing unit is provided at the periphery of the protector, and engages the attachment unit adhered to a mattress, such that the protector is attached to the mattress. The upper layer is made from ticking that includes fibers with anti-bacterial and cooling properties, while the intermediate layer is made of washable cotton, and the lower layer is made from cloth with water repellant treatment.

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#### **US20070116775 - PLASTIC CAVIAR BEAD FOR FILLING OF PILLOW HAVING FUNCTION OF ANTI-BACTERIA**

LEE HO-YOUNG (KR) (Inventor)

Published 2007-05-24

Priority date 2005-11-17 (KR)

The present invention relates to the plastic caviar bead for filling of pillow having function of anti-bacteria that combines the raw materials of synthetic resins of 100 in weight, antimicrobial of 0.5~2 in weight, ceramic with hydrogen silicon and hydrogen aluminum of 3~15 in weight that are pressed and corrected to the shape of granulation with 1~5 mm in its diameter and having an excellent antibacterial function, it helps prevent all sorts of bacteria such as ticks to spread into the pillow while emitting atomic infrared rays that has a positive impact on human body and as well, its spherical shape increases the practicality of plastic caviar bead and enables a flow of air circulation by allowing the space between the beads and by emitting negative ion or atomic infrared rays, as well, the present invention of plastic caviar bead having a foam molding has an effect of light weight and superior comfort that the consumer want.

#### **WO200755458 - AIR MATTRESS FOR AIR BED**

DONG SEO CORP

Published 2007-05-18

Priority date 2005-11-11 (KR)

Disclosed is an air mattress for an air bed, including: an air mattress main body comprised of double-sided fabrics connected to each other by pile yarns to have inside spaces, and maintaining the shape of the main body by injecting the air into the inside spaces; and a guide unit installed on the periphery of the air mattress main body, in which a pile yarn direction of the guide unit is perpendicular to the pile yarn direction of the air mattress main body, the guide unit is comprised of double-sided fabrics connected to each other by pile yarns to have inside spaces, and the air is injected into the inside spaces. The air mattress of the invention manufactures the guide unit with the same material as that of the air mattress main body, thereby reducing the production cost and providing a user with more comfortableness on the bed. In addition, the air mattress main body and the guide unit are installed to be separated from each other. Accordingly, this configuration makes it convenient to transport and easier to assemble the air mattress.

#### **EP1946681 - PILLOW**

DELTA TOOLING CO LTD

Published 2008-07-23

Priority date 2006-11-02 (WO)

A pillow having high air permeability and is capable of ensuring a comfortable sleep. It is structured by using at least one cushioning member formed by stacking plural sheets of three-dimensional solid knitted fabrics as a filler filled in a covering member having air permeability. Since a member prepared by stacking plural sheets of the three-dimensional solid knitted fabrics is used as the cushioning member, air can easily move not only in the right and left, back and forth directions but also in the vertical direction around the head so that high air permeability can be ensured. When an air cushion capable of aspirating and discharging air by change of a load is overlaid on the cushioning member provided with three-dimensional solid knitted fabrics and used, air is automatically aspirated and discharged according to movement of the head. Accordingly, the flow of air passing through the space between yarns of the three-dimensional solid knitted fabric is promoted, which results in further enhancement in aeration function.

#### **EP1949822 - AIR MAT DEVICE AND METHOD OF USING THE SAME**

UNIV TOKYO; NITTA CORP

Published 2008-07-30

Priority date 2006-10-12 (WO)

There is realized a configuration in which, even when pressure is concentrated, the pressure can be adjusted based on accurate and precise detection of pressure distribution, thereby providing sleeping comfort. An air mattress device has a sensor that detects the distribution of pressure applied to an elastic sheet, by means of light emitting parts and light receiving parts of optical fibers uniformly distributed in the elastic sheet. Based on pressure distribution detected by the sensor, the air mattress device adjusts the amount of gas filled in an air mattress. The sensor can be disposed above the air mattress of the air mattress device.

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#### **WO200755880 - MATTRESS WITH A WATER RESISTANT COVER AND INTERCHANGEABLE CUSHIONS**

BG IND

Published 2007-05-18

Priority date 2005-11-04 (US)

A home care or healthcare mattress includes a base foam package, a plurality of interchangeable equal sized quilted cushions fastened on the top of the base foam package, and a top cover covering the cushions and connected to the base foam package by a zipper on the side of the mattress. The base foam package includes one or more foam pieces enclosed in a cover. The top cover is water resistant, flame retardant and antimicrobial.

#### **WO200718579 - SECTIONAL NON-SLIP MATTRESS**

LITVAK VERA (US) (Inventor)

Published 2007-02-15

Priority date 2005-08-05 (US)

The sectional non-slip mattress includes a support frame defining a plurality of compartments and at least one cushion having a plurality of ball bearings received within a cushion housing. Each compartment receives a corresponding ball bearing, thus preventing horizontal movement of the cushion with respect to the support frame. The ball bearings form a first material layer and a second material layer is formed from a set of elastic beads, each having a volume smaller than a volume of each of the ball bearings. A third material layer is formed from a plurality of gel-filled capsules and the three material layers are all housed within a fabric cushion housing, which is permeable to air. An additional air supply may be provided for driving pre-cooled or pre-heated air through the cushion.

#### **WO2006118009 - FLAME-RETARDANT BEDDING PRODUCT**

KANEKA CORP

Published 2006-11-09

Priority date 2005-04-28 (JP)

A bedding product which is comfortable and has high flame retardancy. It sufficiently retains the unique softness and comfortableness inherent in urethane foams. It further retains the intact excellent texture, touch feeling, and other properties inherent in fibrous materials for a flame-barrier fabric. The flame-retardant bedding product is obtained by covering a urethane foam with a flame-barrier fabric made of fibers comprising 5-60 wt.% halogenated fibers, 5-60 wt.% flame-retardant cellulosic fibers, 0-75 wt.% cellulosic fibers, and 0-50 wt.% polyester fibers.

#### **WO200693606 - BEDDING HEM WITH ASSOCIATED INTERLINING**

STANDARD TEXTILE CO INC

Published 2006-09-08

Priority date 2005-03-02 (US)

A bedding product in the form of a flat bed sheet includes a top end, a bottom end, a left side end, and a right side end, with each end including a hem having an associated interlining. For example, the bottom end hem defines an elongated interior space. And the interlining, in the form of an elongated strip, is contained in the interior space. The hem, itself, has an inner edge at the upper surface of the sheet, and an outer edge spaced from the inner edge, with the outer edge also being the bottom edge of the sheet. In addition, the hem has a free end that is wrapped around a portion of the interlining strip, near the hem inner edge, and is tucked into the interior space. The interlining strip is held in position within the interior space of the hem by two rows of stitches. The first row of stitches is near the inner edge, with the stitches passing through the hem (including a portion of the free end) and the interlining strip. The second row of stitches is near the outer edge, with the stitches passing through the hem and the interlining strip. The interlining strip extends generally the length of the hem. The sheet has a greater resistance to creasing and wrinkling than a conventional bed sheet, without an increase in overall bed sheet costs (e. g., purchase, laundering, and other handling costs), and without sacrificing the comfortable feel of the sheet.

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### Bedding

#### **WO200689050 - SYSTEM AND METHOD FOR MAINTAINING AIR INFLATABLE MATTRESS CONFIGURATION**

KCI LICENSING INC

Published 2006-08-24

Priority date 2005-02-16 (US)

A system and method for maintaining an air inflation mattress configuration sufficient for patient support and comfort. Infrared illumination levels are measured within individual or groups of inflated mattress chambers. A staggered approach to illumination monitoring of chambers or sections to eliminate crosstalk between the infrared sensors is carried out. Distributed microprocessor controllers established in a network configuration utilizing controller network protocols reduces the wiring and connections necessary for the assembled system. Various mattress cushion construction techniques, such as sewing and or RF welding methods, are used for the creation of individual chambers utilizing specific types of IR translucent, transparent or reflective materials. The construction of the cushions and bladders in the system includes the use of various types of fabrics with low to high air loss qualities as required. The overall mattress assembly, including the control systems and the methodologies associated with such control systems, provide a unique approach to the maintenance of a consistently comfortable patient support surface. The use of a handheld unit for both programming the system and downloading information about the operation of the system is also anticipated. The specific cushion construction designs associated with the head, body, and foot cushion components of the mattress are tailored to operate specifically with the control capabilities (sensors and air flow regulators) of the invention.

#### **EP1680986 - COMFORT TOP MATTRESS WITH FASTENING PROVISION**

RECTICEL HOLDING NOORD B V

Published 2006-07-19

Priority date 2005-01-11 (NL)

A top mattress comprising a mattress portion having an upper side, an underside virtually parallel thereto, and a head and foot, at least the upper side of the top mattress being intended as lying surface, while, with the aid of a fastening provision, the mattress portion can be fastened to a lower mattress, wherein the fastening provision is designed such that with the top mattress in a condition placed on the lower mattress, displacement of the top mattress relative to the lower mattress is minimized and that thus, a connection to a standard mattress can be realized.

#### **WO200652484 - IMPROVED FABRICS FOR THERAPEUTIC SKIN CARE BEDDING**

PREC FABRICS GROUP INC

Published 2006-05-18

Priority date 2004-11-10 (US)

A fabric for bedding which includes a woven fabric having warp yarns and filling yarns woven to provide a smooth fabric surface. One of the warp or filling yarns being at least 40% by weight of the fabric of continuous filament nylon, and the other of the warp or filling yarns being from about 0% to 60% by weight of the fabric of continuous filament polyester or nylon having non-round filament cross sections. An antimicrobial substance is topically applied or inherently available in the fabric.

#### **EP1804618 - MATTRESS WITH FLAME RESISTANT MOISTURE BARRIER**

DREAMWELL LTD

Published 2007-07-11

Priority date 2005-10-12 (WO)

A flame resistant moisture barrier and a mattress having such a barrier and related methods of manufacture provide mattresses, furniture cushions and other products that provide resistance to flame and moisture.

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**Bedding**

**US20040222685 - CUSHION HAVING PLURAL ZONES WITH DISCRETE COMPRESSIBILITY CHARACTERISTICS**

*L&P PROPERTY MANAGEMENT COMPANY, A CORP. OF DELAWARE*

*POLYESTER FIBERS, LLC, A DELAWARE LIMITED LIABILITY COMPANY*

*WELLS FARGO BANK, NATIONAL ASSOCIATION*

Published 2004-11-11

Priority date 2004-02-05 (US)

A seat cushion or other resilient structure includes a foam inner core combined with layers of varying density fiber batts to impart desirable comfort characteristics, support features and durability thereto. In one embodiment, the foam core is positioned between intermediate layers of low loft fiber batts of relatively high densities. In turn, the intermediate batts are sandwiched between outer high loft fiber batts having relatively low densities. Alternately, the foam core comprises one or more intermediate layers of relatively high density fiber batts that are positioned within the foam core to create one or more fiber batt subcores. The outer high loft fiber batts sandwich the foam core comprising the fiber batt subcores to create the resilient structure.