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This subclass is indented under subclass 636. Subject matter including different adjustable portions which are repositionable relative to each other to change the configuration, dimensions or mode of use.

- (1) Note. The distinct portions of the support generally change the support characteristics of the support or the orientation of the support relative to the user. An appendage such as a strap would not be sufficient to bring the device in this subclass.

**641 Scent neutralizing or disseminating:**

This subclass is indented under subclass 636. Subject matter wherein the head or neck support has means to control an unpleasant odor or to emanate a pleasing odor.

SEE OR SEARCH CLASS:

128, Surgery, subclass 202.18 for pillows with means affecting respiration.

**642 Including springs:**

This subclass is indented under subclass 636. Subject matter wherein the head or neck supporting means has resilient means usually located beneath the supporting surface.

- (1) Note. The spring means includes coil springs, torsion bars, leaf springs or any deformable materials such as wires or bars that tend to return to an undeformed condition.

SEE OR SEARCH THIS CLASS, SUBCLASS:

491, for pillow shams that often include springs.

716+, for mattress or cushion which has a spring core.

SEE OR SEARCH CLASS:

267, Spring Devices, for appropriate subclasses for spring devices of general utility.

**643 With rigid frame or base, or rigidifying or reinforcing means:**

This subclass is indented under subclass 636. Subject matter wherein the head or neck support includes an inflexible frame or base means for the supporting surface or an element or means adapted to rigidify or reinforce the device.

**644 Fluent material containing:**

This subclass is indented under subclass 636. Subject matter wherein the head or neck support means includes a closed or closeable body filled with a flowable material.

- (1) Note. The fluent material containing body must not be porous; once filled it must stay filled until it is emptied.

SEE OR SEARCH THIS CLASS, SUBCLASS:

654, for a support filled with fluent materials.

655.3, for a support filled with inflatable materials.

655.4, for a support filled with beads.

655.5, for a support filled with liquids or gels.

665+, for waterbed.

706+, for a fluent material filled mattress.

909, for supports containing a flowable, viscous (e.g., gel) material.

911, for bead containing.

**645 Compartmented:**

This subclass is indented under subclass 636. Subject matter wherein the head or neck supporting means is divided by internal partition(s) into a plurality of compartments.

- (1) Note. The compartments often have different filler materials.

**646 For arm or hand:**

This subclass is indented under subclass 630. Subject matter having means to support a user's upper extremities relative to the bed.

SEE OR SEARCH THIS CLASS, SUBCLASS:

623, for invalid beds or surgical supports with integral supports for arms or hands.

## SEE OR SEARCH CLASS:

297, Chairs and Seats, subclasses 411.1+ for chairs and seats with special provisions for supporting a user's arms.

**647 Including restraining means:**

This subclass is indented under subclass 646. Subject matter having a supporting surface configuration or auxiliary means, such as straps, which immobilize or restrain a user's arm(s) or hand(s), usually for a surgical procedure.

**648 For lower body portions:**

This subclass is indented under subclass 630. Subject matter especially adapted to support a user's lower extremities.

- (1) Note. The patents in the subclass are specifically adapted to support the thighs, legs, knees, ankles and feet of a person.

## SEE OR SEARCH THIS CLASS, SUBCLASS:

624, for invalid beds or surgical supports within integral supports for lower body portions and subclass 602 for invalid beds or surgical supports especially adapted for birthing or obstetric procedures.

## SEE OR SEARCH CLASS:

297, Chairs and Seats, subclasses 423.1+ for chairs or seats with special provisions for supporting a user's lower body portions.

**649 Heel stirrups:**

This subclass is indented under subclass 648. Subject matter comprising means adapted to support the user's heel, usually to facilitate a gynecological examination or a surgical procedure.

## SEE OR SEARCH THIS CLASS, SUBCLASS:

602, for supports especially adapted for birthing, which often include stirrups.  
624, for invalid beds or surgical supports with integral supports for lower body portions.

**650 Including restraining means:**

This subclass is indented under subclass 648. Subject matter having a supporting surface configuration or auxiliary means, such as straps, which will immobilize or restrain a user's lower body portions, usually for a surgical procedure.

## SEE OR SEARCH CLASS:

128, Surgery, subclass 882 for restrainers or immobilizers adapted to support a user's leg or foot.

**651 With support for sole of feet:**

This subclass is indented under subclass 648. Subject matter including a generally flat surface adapted to contact the user's foot sole or bottom portion of feet.

**652 SUPPORT FOR USER'S BODY OR PART THEREOF:**

This subclass is indented under the class definition. Subject matter comprising a supporting device which provides a surface to support at least a portion of a user's body.

- (1) Note. This subclass and its indented subclasses exclude supports such as sofa beds, invalid beds, surgical supports, support means for discrete portion of a user that are useable with beds or surgical supports, field stretchers, cribs, cradles, bedsteads, waterbeds, fluidized beds, mattresses, cots, camp beds, hammocks, sleeping bags, ground mats, and other devices already provided for in the class.
- (2) Note. This subclass includes "cushions" used to support a user's body or part thereof, not already provided for in the class.
- (3) Note. Art in this class requires some structural modification to materials to adapt them for body support. The mere recitation of a support, wherein the novelty resides in a chemical composition for the support, would not suffice for inclusion in this class; it would place the application in the appropriate composition art area.

SEE OR SEARCH THIS CLASS, SUB-CLASS:

- 600+, for invalid beds or surgical supports.
- 630+, for pillow-type support means for discrete body portions of a user, useable with a bed or surgical support.
- 690+, for mattresses.
- 944, for supports with upstanding, firm, massaging projections.
- 948+, for unconventional filler materials used as supporting means.

**652.1 Ventilated or permitting substantial air or liquid passage:**

This subclass is indented under subclass 652. Support for body or part having an aperture or channel permitting the circulation of fluids (such as ambient air or liquids) between the interior and the exterior of the support, to enhance the comfort of a user.

- (1) Note. The aperture or channel means in the support must permit substantial movement in and out of the support. The use of a porous cover on a support, or the use of a conventional porous foam as the filler, that inherently permit movement of air through their pores, is not sufficient for classification in this subclass.
- (2) Note. Excluded from this subclass are supports with slits, grooves, or cutouts on a support surface provided for localized altering of the firmness of the support.
- (3) Note. This subclass includes cushions that permit the draining of liquids there-through, of the type used outdoors.

SEE OR SEARCH THIS CLASS, SUB-CLASS:

- 704, for mattresses in which the handle means are provided with means providing ventilation.
- 717, for spring mattresses that have edge or border features that may include ventilating means.
- 724+, for ventilated mattresses.
- 730, and 736, for channels, grooves, peaks, or valleys on a mattress top surface that may inherently provide a ventilated user supporting top surface.

SEE OR SEARCH CLASS:

- 297, Chairs and Seats, subclasses 180.1+ and 452.42 for ventilated chairs and seats.

**652.2 With means to force ventilation:**

This subclass is indented under subclass 652.1. Ventilated support with a device such as a fan or air pump to propel air into and out of the support.

SEE OR SEARCH THIS CLASS, SUB-CLASS:

- 423, for devices to force heated or cooled air.
- 941, for blankets that provide a forced air flow to a user.

SEE OR SEARCH CLASS:

- 297, Chairs and Seats, subclass 180.13 for seats and chairs ventilated with forced air.

**653 Removable support specially adapted for seating:**

This subclass is indented under subclass 652. Subject matter comprising a portable pad or cushion with a supporting surface, which due to its support characteristics, construction, shape or size is specially adapted to support a user's buttocks in a seated position, with the pad or cushion being removably positionable on a chair, wheelchair or similar support.

- (1) Note. Art in this class requires some structural modification to materials to adapt them for body support. The mere recitation of a support, wherein the novelty resides in a chemical composition for the support, would not suffice for inclusion in this class; it would place the application in the appropriate composition art area.

SEE OR SEARCH THIS CLASS, SUB-CLASS:

- 690+, for mattresses.

SEE OR SEARCH CLASS:

- 297, Chairs and Seats, subclasses 180.1+ for chairs and seats having heating or ventilating means, subclasses 250.1+ for cushions that have detachable con-

nection means for attachment to a chair or seat, and subclasses 452.21+ for contoured bottoms of chairs or seats.

**654 Fluent material containing (e.g., air, water, gel):**

This subclass is indented under subclass 653. Subject matter in which the pad or cushion contains a flowable material such as a liquid, gas, gel or a plurality of beads.

SEE OR SEARCH THIS CLASS, SUB-CLASS:

- 644, for support means useable with beds or surgical supports, containing a flowable material.
- 655.3, for supports containing a gas such as air.
- 655.4, for supports containing fluent solid particles.
- 655.5, for supports containing a liquid.
- 665+, for waterbeds, which comprise liquid filled body supports for the whole body.
- 689, for fluidized beds.
- 702, for mattresses filled with solid fluent materials.
- 706+, for mattresses filled with a gas such as air.
- 909, for supports containing a fluent material.
- 911, for supports containing beads.

SEE OR SEARCH CLASS:

- 297, Chairs and Seats, subclasses 284.6 and 452.41 for fluent material containing and Digest 3, for pneumatic supports.

**654.1 With spring means (e.g., coil type):**

This subclass is indented under subclass 653. Support for body or part in which the pad or cushion containing a potential energy storing device that temporarily compresses when a user sits.

SEE OR SEARCH THIS CLASS, SUB-CLASS:

- 642, for pillow-type supports that comprise springs.
- 652.1, for ventilated supports that may comprise springs.
- 655.7, for supports that comprise springs.

716+, for mattresses that comprise springs.

SEE OR SEARCH CLASS:

- 267, Spring Devices, subclasses 142+ a for cushion for human comfort.

**655 Specially adapted for infant support:**

This subclass is indented under subclass 652. Subject matter in which the body supporting surface is particularly constructed, shaped or sized to support an infant.

- (1) Note. This subclass includes changing tables and pads that have some modification or structure to facilitate the changing of an infant's diapers.

SEE OR SEARCH THIS CLASS, SUB-CLASS:

- 93.1+, for cribs.
- 101+, for cradles.
- 424+, for safety devices.
- 603, for invalid beds or surgical supports specially adapted for infant support.
- 940, for devices having alarm means that can include alarms detecting the removal of an infant from a support, the crying of an infant, or temperature changes on an infant support.
- 945, for inflatable baby supports that have inflatable peripheral guards.
- 947, for wall mounted baby changers.

**655.3 Inflatable (e.g., air containing):**

This subclass is indented under subclass 652. Support for body or part containing or fillable with a gas which is usually air.

SEE OR SEARCH THIS CLASS, SUB-CLASS:

- 644, for pillow-type supports filled with fluent materials.
- 654, for supports adapted to be seated upon, containing a fluent material.
- 706+, for mattresses filled with a gas which is usually air.

**655.4 Bead containing:**

This subclass is indented under subclass 652. Support for body or part having at least a portion thereof filled with a large number of small particles of particulate solid material that are adapted to flow relative to one another as a fluent material.

- (1) Note. The particulate solid material may be sand; spheres of plastic, metal, wood, or ceramic; beans; or other similar materials, usually enclosed in a container.

SEE OR SEARCH THIS CLASS, SUB-CLASS:

- 644, for pillow-type supports with fluent materials.  
 654, for supports, especially adapted to be seated on, filled with fluent materials.  
 702, for mattresses with solid, fluent materials.  
 911, for devices filled with beads.

**655.5 Liquid or gel containing (e.g., water):**

This subclass is indented under subclass 652. Support for body or part comprising a wettable fluid filler which is usually water.

SEE OR SEARCH THIS CLASS, SUB-CLASS:

- 644, for pillow-type supports containing a fluent material.  
 654, for supports adapted to be seated on which include a fluent filler.  
 665+, for waterbeds, which comprise liquid filled body support for the whole body.

**655.6 Tufted:**

This subclass is indented under subclass 652. Support for body or part including a plurality of connectors, usually in the form of stringlike filaments, generally connecting the upper and lower portions of the supports.

- (1) Note. Usually a cover encapsulates a support and is secured to the support at points spaced apart on the cover's surface by filaments which pass from the surface of one side of the cover completely through the support to the surface of the cover on the opposite side of the support, to keep the support in a compressed state, to thereby prevent loss of shape or expansion of the support.
- (2) Note. The filaments are often attached to tufting buttons placed on the top cover and under the bottom cover of a support.

SEE OR SEARCH THIS CLASS, SUB-CLASS:

- 408, for a bedstead with a bottom, with a pad connected by tufting.  
 712, for gas containing mattresses having ties or seals.

SEE OR SEARCH CLASS:

- 24, Buckles, Buttons, Clasps, etc., subclass 114.3 for tufting buttons and subclass 102 for linked tufting.  
 112, Sewing, subclass 2.2 for a machine to sew tufting, subclass 80.01 for embroidery tufting, and subclass 470.24 for a tuft making machine.

**655.7 Spring containing (e.g., coil type):**

This subclass is indented under subclass 652. Support for body or part including at least one potential energy storing device that provides substantial support for a user and will temporarily compress when a user's weight is placed on the support, the support usually comprising an upholstery material such as a ticking, and usually including a padding material (e.g., batting or foam) above the member and below the ticking.

SEE OR SEARCH THIS CLASS, SUB-CLASS:

- 230+, 239+, and 246+, for a bed bottom disclosing structure framing or metallic connections of springs.  
 642, for pillow-type head supports that include springs.  
 654.1, for seat-type supports comprising spring means.  
 716+, for mattresses comprising springs.

SEE OR SEARCH CLASS:

- 267, Spring Devices, subclasses 142+ for a cushion for human comfort.

**655.8 Compartmentalized springs:**

This subclass is indented under subclass 655.7. Spring containing support in which the plurality of the potential energy storing devices are separated by partitions.

- (1) Note. Usually individual or small group of springs are enclosed in a clothlike cover to isolate the individual springs or group of springs from other springs.

SEE OR SEARCH THIS CLASS, SUB-CLASS:  
720, for mattresses having compartmentalized springs.

**655.9 With substantial foam component:**

This subclass is indented under subclass 652. Support for body or part comprising an ample amount of usually resilient expanded cellular material.

SEE OR SEARCH THIS CLASS, SUB-CLASS:  
630+, for pillow-type supports that often contain foam.  
690+, especially subclass 727, for mattresses that often contain foam.  
740, for mattresses having unusual foam materials or foam configurations.  
953, for body supports comprising expanded cellular substance(s) having unconventional physical or chemical properties.

**656 Specially adapted for outdoor use:**

This subclass is indented under subclass 652. Subject matter wherein significance is attributed to the nature, construction, or materials of the supporting device which specially adapted it for use out of doors.

- (1) Note. This subclass includes devices that facilitate the suntanning of a user.
- (2) Note. This subclass includes devices adapted to support the head of a user in an outdoor setting, while shading at least a part of a user's head with a shade or canopy.

SEE OR SEARCH THIS CLASS, SUB-CLASS:  
110+, for cots.  
112+, for camp beds.  
119, for supports attached to the outside of a vehicle.  
120+, for hammocks.  
413, for sleeping bags.  
414+, for devices under the class definition with mosquito nets or canopies.  
417+, for ground mats.  
938, for devices that include a reflective material which facilitates suntanning.

SEE OR SEARCH CLASS:

- 135, Tent, Canopy, Umbrella, or Cane, subclasses 87+ for a canopy.  
297, Chairs and Seats, subclass 184.1 for weather shields.

**657 With distinct adjustable supporting parts:**

This subclass is indented under subclass 652. Subject matter in which the body supporting device presents at least two distinct body supporting surfaces or portions, one of which is adjustable relative to the user's body.

SEE OR SEARCH THIS CLASS, SUB-CLASS:  
613+, for invalid beds or surgical supports for various adjustable support portions.  
722, for mattresses that have distinct movable sections.

**657.5 With edge roll, cord, or welt:**

This subclass is indented under subclass 652. Support for body or part including a peripheral ropelike reinforcing or decorative means (such as piping) usually associated with a covering of the support.

SEE OR SEARCH THIS CLASS, SUB-CLASS:  
406+, for pads with covers that have a bead.  
717, for innerspring core-type mattresses having substantial edge or side features.  
739, for mattresses having substantial means to form or strengthen their edges or borders.

**658 ATTACHMENT OR ACCESSORY:**

This subclass is indented under the class definition. Subject matter wherein significance is attributed to a nonessential article which is especially adapted for use with a bed or other device under the class definition.

- (1) Note. The devices of this subclass are structurally modified to be used with bed or other device under the class definition, or are devices that due to their nature are inherently and exclusively used with a bed or other device under the class definition. A mere recitation of utility with a bed or other device under

the class definition would not be sufficient to classify a patent in this subclass.

SEE OR SEARCH THIS CLASS, SUBCLASS:

503.1+, for receptacles or supports for use with beds or other devices under the class definition.

904, 905, 907, 908, 915, 916, 931, and other appropriate cross-reference art collections for devices in combination with devices under the class definition.

**659 For placement below a mattress and above its supporting structure (e.g., bed boards):**

This subclass is indented under subclass 658. Subject matter comprising an attachment or accessory adapted to be removably positioned between a mattress and its supporting structure, for the purpose of altering the support characteristics of the mattress.

- (1) Note. This subclass includes bed boards that are generally planar and firm elements that are removably positioned below a mattress and above its supporting surface (e.g., box spring) for the purpose of improving the supporting characteristics of the mattress, as by making the mattress firmer.

**660 Adapted to incline mattress or portion thereof:**

This subclass is indented under subclass 659. Subject matter wherein the attachment removably placeable between the mattress and above the supporting structure for the mattress is adapted to slant at least a portion of the mattress relative to the supporting structure whereby the back portion or the foot portions of the user of the mattress are in an inclined position.

- (1) Note. The attachments in this subclass include mechanical or inflatable devices that can adjustably change the inclination of the mattress relative to its supporting structure.

SEE OR SEARCH THIS CLASS, SUBCLASS:

634, for body supports placeable on a mattress or surgical support that can sup-

port a user's back portions at adjustable inclinations.

**661 Extenders for head portion or foot portion of bed:**

This subclass is indented under subclass 658. Subject matter comprising attachments which are adapted to be removably connected to the head or foot portion of a bed, or other device under the class definition, at the same level as the supporting surface of the bed, for the purpose of increasing the length of the supporting surface to accommodate a user of above normal height.

- (1) Note. The attachments in this subclass may be removably connected to a mattress or frame portions of a bed, and once connected, increase the surface area available to support a user's body.

**662 Self-help support, grip or handhold:**

This subclass is indented under subclass 658. Subject matter comprising accessories attachable to a bed or other device under the class definition for the purpose of aiding a user in repositioning himself or herself on the bed surface.

SEE OR SEARCH THIS CLASS, SUBCLASS:

81.1, for invalid lifting and transferring devices with which the invalid is repositioned on a bed or like surface by an attendant such as a nurse.

SEE OR SEARCH CLASS:

4, Baths, Closets, Sinks, and Spittoons, subclasses 576.1, 577.1 for hand grips used on bath tubs.

**663 Adapted to cover or protect a rail or frame portion of a bed:**

This subclass is indented under subclass 658. Subject matter comprising an attachment or accessory that is attached or attachable to a frame or rail portion of a bed, or like device, for the purpose of guarding the frame or rail from contact with a wall or the like, or to guard a user of the bed from being bumped or bruised by the rail or frame portion of the bed.

SEE OR SEARCH THIS CLASS, SUB-CLASS:

- 424, for safety devices in general.
- 678+, for waterbeds that have frames with rail caps.
- 909, for waterbed frames that may have railcaps.

SEE OR SEARCH CLASS:

- 248, Supports, subclass 345.1 for bumper or scuff plate used with supports of general utility.

**665 WATERBED OR ASSOCIATED DEVICE:**  
This subclass is indented under the class definition. Subject matter comprising a structure, providing a flexible supporting surface for substantially the whole body of a user, at least a portion of the structure adapted to enclose an amount of liquid, and devices associated with such a liquid enclosing structure.

- (1) Note. Waterbeds generally comprise a flexible bladder confining a liquid, with the bladder supported or surrounded by a frame structure, with the bladder adapted to provide a yieldable supporting surface for substantially the whole body of a user reclining in a generally horizontal position.
- (2) Note. Associated devices include structures that are combined with waterbeds, or have been significantly modified to be used or useful with waterbeds.
- (3) Note. A waterproof liner is often placed between a bladder and its surrounding frame to collect and contain any liquid that may spill upon the rupture of the bladder and would be found in this and indented subclasses.
- (4) Note. Waterbeds in which another mattress, such as an air filled mattress, is placed permanently or removably on top of the liquid bladder to support the user are classified in this and indented subclasses.
- (5) Note. Liquid containing supports that do not support substantially the whole body of a user are not considered waterbeds.

SEE OR SEARCH THIS CLASS, SUB-CLASS:

- 308, for bedsteads having receptacles, drawers, or compartments.
- 400+, for bedsteads having a bottom.
- 644, for pillow-type supports containing fluent materials.
- 654, for seat cushions comprising fluent materials.
- 655.3, for inflatable supports (e.g., cushions).
- 655.5, for a liquid or gel containing support for a user's body or part thereof.
- 706+, for inflatable mattresses (e.g., air mattresses).
- 932, for seals and sealing methods for plastics.

SEE OR SEARCH CLASS:

- 156, Adhesive Bonding and Miscellaneous Chemical Manufacture, subclasses 60+ for methods of sealing plastic materials.

**666 With sound or light means:**  
This subclass is indented under subclass 665. Waterbed or associated device including a loudspeaker or an illumination device.

- (1) Note. The loudspeakers associated with the waterbed may, in addition to audible sound, produce electromagnetic waves that may be felt as vibration by the user of the waterbed.

SEE OR SEARCH THIS CLASS, SUB-CLASS:

- 904, for a sound emitting device.
- 905, for a light emitting device.

SEE OR SEARCH CLASS:

- 362, Illumination, subclass 130 for illuminating devices useable with a bed.

**668 With insulating means:**  
This subclass is indented under subclass 665. Waterbed or associated device with discrete means to inhibit or selectively control transfer of thermal energy between a waterbed and the user of a waterbed, or between the waterbed and the surrounding environment.

- (1) Note. The insulating means generally comprise materials such as foam, fabric, air filled containers, or other generally poor conductors of thermal energy.
- (2) Note. Devices whose sole function is to insulate must be present for patents in this subclass, not merely conventional frames, bedclothes, covers, or liners that inherently have insulating properties.

SEE OR SEARCH THIS CLASS, SUB-CLASS:

- 700, for mattresses having insulating means.
- 938, for devices that include reflective materials.

SEE OR SEARCH CLASS:

- 428, Stock Material or Miscellaneous Articles, subclasses 402+ for particulate matter.

**669 With bedclothes:**

This subclass is indented under subclass 665. Waterbeds or associated device comprising (a) a covering sheet, blanket, pillowcase, sham, etc. for the waterbed or the user or (b) means to retain a covering sheet relative to the waterbed or user.

SEE OR SEARCH THIS CLASS, SUB-CLASS:

- 482+, for bedclothes.
- 504.1+, for a support for bedclothes.
- 692, for a mattress having means to facilitate application or retention of bedclothes.
- 923, for bedclothes that include hook and loop type fasteners.

SEE OR SEARCH CLASS:

- 24, Buckles, Buttons, Clasps, etc., subclass 72.5 to hold bedclothes.

**670 With massaging by fluid jet:**

This subclass is indented under subclass 665. Waterbeds or associated device having a nozzle-type apparatus that forcefully directs liquid or gas, from within the water-containing bladder, against the supporting surface of the bladder to massage a user.

SEE OR SEARCH CLASS:

- 4, Baths, Closets, Sinks, and Spittoons, subclasses 541.1+ for means to agitate the water in a tub.
- 601, Surgery: Kinesitherapy, subclasses 154+ for lavative devices.

**671 With filling or draining means:**

This subclass is indented under subclass 665. Waterbeds or associated devices having means (e.g., valves) to facilitate the insertion or removal of a liquid, into or out of the bladder.

- (1) Note. A mere conventional valve on the bladder is not sufficient to classify a patent in this subclass.
- (2) Note. This subclass receives patents which claim specialized valves or ports for the filling or emptying of the bladder.

SEE OR SEARCH CLASS:

- 137, Fluid Handling, subclasses 223+ for inflatable article and subclass 883 for single inlet and multiple valved outlets.
- 141, Fluent Material Handling, With Receiver or Receiver Coacting Means, subclasses 65+ for evacuation apparatus, subclass 114 for manipulation of flexible or collapsible receiver or supply, subclasses 313+ for filling means with flexible or collapsible receiver or receiver coacting means, and subclass 382 for flexible hose terminal filling means with receiver engaging means.
- 251, Valves and Valve Actuation, subclass 61.1 for flexible, expansible wall with reciprocating valve actuator and subclasses 129.01+ for electrically actuated valves.

**672 Including pump means:**

This subclass is indented under subclass 671. Waterbed filling or draining means with a fluid moving apparatus that facilitates conveying a fluid.

SEE OR SEARCH CLASS:

- 417, Pumps, subclasses 151+ for jet pump moving one fluid pumped by contact or entrainment with another.

- 673 Including air removal (e.g., burping) means:**  
This subclass is indented under subclass 671. Waterbed filling or draining means having means to release gas that accumulates in a liquid filled bladder.
- 674 With vibration or wave producing means:**  
This subclass is indented under subclass 665. Waterbeds or associated devices including an apparatus imparting a mechanical movement to the bladder to create an oscillation or undulation.
- SEE OR SEARCH THIS CLASS, SUBCLASS:  
666, for a wave or vibration imparted to a waterbed bladder through a speaker or other electromagnetic radiation emitting means.  
915, for a vibrating means.
- SEE OR SEARCH CLASS:  
601, Surgery: Kinesitherapy, subclasses 49+, 86, 90, 98, 115+, and 146 for body support vibrator.
- 675 With decorative means:**  
This subclass is indented under subclass 665. Waterbeds or associated devices having a primarily ornamental feature.
- (1) Note. The decorative feature may include (a) a mirror, colored or textured panels for the frame portion of the waterbed, or (b) coloring or texturing means for the bladder.
- SEE OR SEARCH THIS CLASS, SUBCLASS:  
280, for decorative structures in a bedstead.  
907+, for a decorative feature.
- SEE OR SEARCH CLASS:  
D6, Furnishings, subclasses 382+ for a bed ornamental feature.
- 676 With highly viscous filler:**  
This subclass is indented under subclass 665. Waterbeds or associated devices in which the liquid within the bladder has more tendency to hold together as it flows (i.e., thicker) or more gel-like than water, for example.
- (1) Note. The viscous liquid within the bladder may be water to which a viscosity increasing chemical additive has been added or it may be a non-aqueous, flowable, high viscosity composition.
- SEE OR SEARCH THIS CLASS, SUBCLASS:  
655.5, for liquid or gel containing body support.  
909, for flowable, viscous (e.g., gel) material containing.
- 677 With stretchable bladder wall:**  
This subclass is indented under subclass 665. Waterbeds or associated devices in which the surface area of a wall or walls of the structure can increase in size upon a user being positioned on the wall and, upon the user withdrawal, the wall or walls retract to their original size.
- (1) Note. The expandable and retractable walls of the bladder may be made from a smooth, homogeneous elastic material, or may be made from a material that has expandable folds molded therein.
- (2) Note. The elasticity of the top, user supporting surface of the bladder may be nonuniform across the top, thereby providing different support characteristics for different users utilizing the waterbed.
- 678 With frame means supporting or surrounding a removable bladder:**  
This subclass is indented under subclass 665. Waterbeds or associated devices including a boxlike construction that holds the liquid enclosing structure above a floor or encompasses the liquid enclosing structure perimeter, with the construction located outside the liquid enclosing structure.
- (1) Note. Frame structures in this subclass are often made of wooden boards.
- (2) Note. This subclass may include waterproof liners placed between a bladder and a frame to contain any liquid that may spill when the bladder ruptures.

- (3) Note. This subclass may include permanent or removable covers or caps for frame elements to cushion hard portions or edges of frames, thereby providing a softer, more yielding support for a user.

SEE OR SEARCH THIS CLASS, SUB-CLASS:

- 400+, for bedsteads having bottoms.  
663, for structures adapted to cover or protect a rail or frame portion of a bed.

**679 With pedestal means:**

This subclass is indented under subclass 678. Waterbed frame including substantial structural elements under the construction supporting or surrounding the bladder, to substantially raise the bladder above a supporting floor surface, to thereby facilitate access of a user to the bladder.

- (1) Note. The pedestal may include wooden boards defining a boxlike structure or a wheeled metal subframe that permits the rolling movement of the waterbed.

**680 Comprising foam:**

This subclass is indented under subclass 678. Waterbed frame in which the supporting or surrounding construction comprises a substantial amount of a material in a lightweight cellular form resulting from introduction of gas bubbles during manufacture.

- (1) Note. The foams used with the frames are generally soft, semirigid polymeric foams that provide structural integrity to the frame or a soft, yielding surface for the peripheral areas of the bladder.

SEE OR SEARCH THIS CLASS, SUB-CLASS:

- 687, for waterbeds that may have integral foam peripheral elements that do not permit the removal of the bladder.

**681 Inflatable (e.g., air frame):**

This subclass is indented under subclass 678. Waterbed frame in which at least a portion of the construction is expandable with air or gas.

SEE OR SEARCH THIS CLASS, SUB-CLASS:

- 687, for waterbeds that may have integral foam peripheral elements that do not permit the removal of the bladder.

**682 Having baffle means:**

This subclass is indented under subclass 665. Waterbeds or associated devices disclosing the use of devices within the bladder which have the function of controlling the movement of liquid, or waves within the bladder that are formed when a user gets on or off, or moves on the top surface of the bladder.

- (1) Note. This subclass must have structural elements that are located inside the water filled bladder and may or may not be connected to the bladder's inner walls.  
(2) Note. The baffles in this subclass generally comprise strips or sheets of plastic materials, chunks, or layers of polymeric foams, all located within the bladder.

**683 Hydraulic chambers:**

This subclass is indented under subclass 682. Waterbed with baffle in which the baffle structure comprises a plurality of apertured sheets that divide the interior of the bladder into a plurality of compartments or enclosures, into and out of which liquid enters and exits as a user gets on or off, or moves on the top, supporting surface of the bladder.

**684 Fiber containing:**

This subclass is indented under subclass 682. Waterbed with baffle in which the baffle structure comprises a slender and greatly elongated natural or synthetic filament.

- (1) Note. The fibrous material is usually manmade and permits movement of water in the space between the strands of fibrous material.

SEE OR SEARCH CLASS:

- 428, Stock Material or Miscellaneous Articles, subclasses 357+ for coated or structurally defined flake, particle, cell, strand, strand portion, rod, filament, macroscopic fiber, or mass thereof.

**685 Having plural, distinct removable bladders:**

This subclass is indented under subclass 665. Waterbeds or associated devices comprising at least two individual liquid enclosing structures that together define a supporting surface for a user, with at least one of the structures replaceable.

- (1) Note. The plurality of individual bladders are generally adjacent to each other and are individually fillable to a desired degree to provide a nonuniform supporting surface across the top portion of the waterbed.

**686 Integral, unitary bladder structure:**

This subclass is indented under subclass 665. Waterbeds or associated devices in which the liquid enclosing structure is one baglike container.

**687 With side or internal chamber or bladder:**

This subclass is indented under subclass 686. Waterbed with unitary bladder in which the user supporting liquid enclosing structure has a surrounding or internal air or other fluid containing compartment that is integral with the structure, or in which the liquid enclosing structure is divided by an air or other fluid containing compartment into separate and distinct compartments that cannot be removed or replaced relative to each other.

SEE OR SEARCH THIS CLASS, SUBCLASS:

680+, for waterbeds that may have foam or inflatable peripheral elements, in which the bladder is removable from the peripheral elements.

**688 With corner reinforcing means:**

This subclass is indented under subclass 686. Waterbed with unitary bladder in which a 90° portion of the bladder perimeter is strengthened to prevent rupture of the bladder.

- (1) Note. The corner areas may be reinforced by sealingly attaching additional layers of plastic materials to the corners of the bladder.
- (2) Note. The corner reinforcing means may be rough or textured materials that have

the additional function of gripping and retaining bedclothes between a bladder and a frame.

SEE OR SEARCH THIS CLASS, SUBCLASS:

739, for mattresses that have means to form or strengthen the edge, border, or corner of the mattress.

**689 FLUIDIZED BED:**

This subclass is indented under the class definition. Subject matter comprising a supporting surface for the whole body of a user in which at least a part of the supporting surface is provided by a pressurized stream of gas, usually air, or by a very large number of small, solid particulate material (e.g., beads) that are at least temporarily lifted and kept in a suspended fluidized state by a pressurized stream of gas and device associated with such supporting surface.

- (1) Note. The particulate, solid fluidizable beads may be spheres of plastic, metal, ceramic, wood, sand, or other materials, in sizes and shapes that are fluidizable by a stream of pressurized gas.
- (2) Note. The fluidizable beds of this subclass are often used to support burn victims or are used to prevent or treat bed sores.

SEE OR SEARCH THIS CLASS, SUBCLASS:

652.2, for supports for a user's body or part thereof (e.g., cushions) containing beads.

702, for mattresses containing fluent particulate solid fillers (e.g., beads).

940, for microporous covers that permit the passage of air, but not of solids such as beads.

SEE OR SEARCH CLASS:

137, Fluid Handling, subclass 883 for system with flow control means for branched passages having a single inlet with multiple distinctly valved outlets.

601, Surgery: Kinesitherapy, subclass 158 for lavative device with applicator having specific movement on a couch.

604, Surgery, subclasses 890.1+ for controlled release therapeutic device or system.

**690 MATTRESS (FOR WHOLE BODY):**

This subclass is indented under the class definition. Subject matter comprising a pad which is generally adapted to be removably placed upon an underlying support, such as a bedstead, frame, or a boxspring, and is of a size sufficient to underlie and support substantially the whole of a person's body, the purpose of which is to make the person more comfortable while resting.

- (1) Note. A device in this subclass is intended to be used with an underlying support, but does not include the underlying support and could be used without it.
- (2) Note. Art in this class requires some structural modification to materials to adapt them for body support. The mere recitation of a support, wherein the novelty resides in a chemical composition for the support, would not suffice for inclusion in this class; it would place the application in the appropriate composition art area.

**SEE OR SEARCH THIS CLASS, SUBCLASS:**

- 400+, for a bottom either with or without a mattress or cushion.
- 420, for a pad intended to lie directly on the ground or floor.
- 630+, for supports for discreet portion(s) of a user's body, useable with a bed or surgical support.
- 652+, for supports for user's body or parts thereof, such as subclasses 653+ for cushions specially adapted to be seated on or subclass 655 for supports especially adapted for infants.
- 665, for waterbeds and associated devices.
- 689, for fluidized beds and associated devices.
- 902, for mattresses with a nonrectangular supporting surface.
- 948+, for filler materials used in body supports.

**SEE OR SEARCH CLASS:**

- 29, Metal Working, subclasses 91+ for upholstered article making.
- 53, Package Making, subclass 524 for compacting mattress filling.
- 248, Supports, subclasses 560+ for resilient supports.
- 267, Spring Devices, subclass 75 for reciprocating bed cushioning devices, subclasses 80+ for a spring panel, subclass 130 for press cushion, and subclasses 142+ for cushion.
- 297, Chairs and Seats, subclass 452.48 for a seating device employing a cushion as a component thereof and limited by construction to a chair component, such as back or buttock support, as by particular shape to fit the contour of the body or by means to detachably connect the cushion to an underlying back or seat.
- 428, Stock Material or Miscellaneous Articles, subclass 71 for sheet including cover encasing foam, subclass 74 for sheet including cover encasing noninterengaged fibered material (e.g., batt), subclass 101 for superposed movable attached layers, subclasses 102+ for web or sheet including stitching and discrete fastener, coating or bond, subclass 116 for a honeycomblike web or sheet, and subclass 178 for nonplanar uniform thickness material with cells.
- 441, Buoys, Rafts, and Aquatic Devices, subclass 127 for a cushion convertible to a water rescue of life protecting apparatus and subclasses 129+ for body supporting buoyant device.

**691 Supported on or removably attachable to another mattress:**

This subclass is indented under subclass 690. Mattress especially adapted to be removably placed on top of another mattress, beneath a user.

- (1) Note. The mattresses under this subclass are of substantially the same length and width as the mattress on top of which they are supported, are usually thinner than the mattress they are supported on, but are substantially thicker than a

quilted sheet, and often include separable fasteners, such as straps or belts that help their removable retention on the supporting mattress.

SEE OR SEARCH THIS CLASS, SUB-CLASS:

500, for a multilayered sheet adapted to contact a mattress.

736, for mattresses with egg crate peaks and valleys on their top surfaces, that are often used removably on top of a supporting mattress.

**692 Having means to facilitate application or retention of bedclothes:**

This subclass is indented under subclass 690. Mattress including structure which simplifies application of, or which holds, a sheet, cover, spread, etc., thereto.

SEE OR SEARCH THIS CLASS, SUB-CLASS:

482+, for bedclothing.

488+, for bedclothing and a means not part of the mattress to facilitate changing thereof.

669, for bedclothes especially adapted for waterbeds.

SEE OR SEARCH CLASS:

24, Buckles, Buttons, Clasps, etc., subclass 72.5 for bedclothes holders.

297, Chairs and Seats, subclass 219.1 for detachable supplemental covers for chairs or seats.

**693 With magnetic means:**

This subclass is indented under subclass 690. Mattress including a dipolar conductive material such as a permanent magnet or an electromagnet.

(1) Note. The presence of a magnet that is part of a motor associated with the mattress is not sufficient to classify in this subclass.

(2) Note. The magnets passively associated with the mattress in this subclass allegedly provide "health benefits" to a user resting on the mattress, but are not "actively" used in treating a diseased patient.

SEE OR SEARCH THIS CLASS, SUB-CLASS:

906, for devices that include a magnet.

SEE OR SEARCH CLASS:

600, Surgery, subclasses 9+ for magnetic devices used for therapy.

**694 With disparate article or article retention means:**

This subclass is indented under subclass 690. Mattress including various outside the class devices such as (a) a gun, sound emitting means, or safe, or (b) pocket or cavity adapted to accommodate such a device.

(1) Note. Disparate articles that provide or alter the body supporting structure of the mattress, such as springs, stiffening boards, or insulating materials, and disparate articles, such as head supports, ventilating fans, or bedclothes retaining means, that are provided for elsewhere under this mainline title are excluded from this subclass.

**695 Toilet or bedpan means:**

This subclass is indented under subclass 694. Mattress with disparate article wherein provision is made for a device to collect human waste or retain the device.

(1) Note. This subclass takes patents disclosing a mattress which is modified to accept the toilet means, whereas the bed bottom is not.

(2) Note. Netting means permitting the passage of excrements is considered a toilet or bedpan means.

SEE OR SEARCH THIS CLASS, SUB-CLASS:

604+, for invalid beds or surgical supports that have toilet means.

SEE OR SEARCH CLASS:

4, Baths, Closets, Sinks, and Spittoons, subclasses 300+ for flush closets and subclasses 450+ for bedpans.

**696 Tufted:**

This subclass is indented under subclass 690. Mattress including a plurality of vertical string-like filaments, generally between the upper and lower portions of the mattress.

- (1) Note. Usually a cover encapsulates a pad and is secured to the pad at points spaced apart on the cover's surface by filaments which pass from the surface of one side of the cover completely through the pad to the surface of the cover on the opposite side of the pad to keep the pad in a compressed state and to thereby prevent loss of shape or expansion of the pad.
- (2) Note. The filaments are often attached to tufting buttons placed on the top cover and under the bottom cover of a pad.

SEE OR SEARCH THIS CLASS, SUBCLASS:

- 408, for an upholstered mattress or cushion in combination with a bottom, wherein the mattress or cushion has tufting.
- 655.6, for supports for a user's body, or part thereof, including the use of tufting filaments.
- 712, for gas containing mattresses having ties or internal seals.

SEE OR SEARCH CLASS:

- 24, Buckles, Buttons, Clasps, etc., subclass 114.3 for tufting buttons and subclass 102 for linked tufting.
- 112, Sewing, subclass 2.2 for a machine to sew tufting, subclass 80.01 for embroidery tufting, and subclass 470.24 for a tuft making machine.

**697 Having uniform firmness, changeable by user:**

This subclass is indented under subclass 690. Mattress including means to change the supporting characteristics of the mattress as a whole from stiffer to less stiffer modes and vice versa.

- (1) Note. The means to change the firmness of the mattress generally include means such as tightenable lacings or strings that crisscross the mattress, or means that are

used to loosen or tighten the support characteristics of springs within the mattress.

- (2) Note. Excluded from this subclass are gas filled mattresses that could have their firmness changed by increasing or decreasing the gas pressure, reinforced mattresses that have a rigid layer or plate within them, and mattresses that have a plurality of sections of different firmnesses.

SEE OR SEARCH THIS CLASS, SUBCLASS:

- 701, for reinforced mattresses that have a rigid layer of plate.
- 706+, for gas containing mattresses.
- 727+, for mattresses that have a plurality of sections of different firmnesses.
- 936, for devices that have springs of variable or adjustable support characteristics.

SEE OR SEARCH CLASS:

- 267, Spring Devices, subclass 177 for a coil spring including an adjustable end thrust member to vary the thrust reaction.

**698 With fireproof material:**

This subclass is indented under subclass 690. Mattress having at least a part of which is formed from a material which is resistant to burning.

SEE OR SEARCH THIS CLASS, SUBCLASS:

- 483, for fireproof bed clothing.
- 700, for insulating mattresses that may be fireproof.
- 954, for materials having fire resistance used in making devices of the class definition.

SEE OR SEARCH CLASS:

- 428, Stock Material or Miscellaneous Articles, subclasses 443+ for composite laminate including asbestos and subclasses 920+ for fire or heat protection feature.

**699 Having waterproof or allergenproof outer surface:**

This subclass is indented under subclass 690. Mattress comprised of material(s), on at least a substantial top portion thereof, that prevents the passage of liquid or spores, dust, insects, etc. therethrough.

- (1) Note. A part of the top portion of the mattress may be made from an inherently waterproof material, may have been chemically or physically treated to be waterproof, or may have been provided with an integral waterproof covering portion, primarily to prevent the passage of liquids into or through the body of the mattress.
- (2) Note. Removable covers or tickings that may incidentally be made from water resistant materials are excluded from this subclass.
- (3) Note. The mattress top, or cover thereof, may permit the passage of gasses, vapors, and microscopic particles, such as bacteria, but will prevent the passage of liquids.
- (4) Note. This subclass includes allergen-proof mattresses that in addition to preventing the passage of liquids into and out of the mattress, will prevent the passage of allergens, such as mite and mite feces.
- (5) Note. Gas containing mattresses, which inherently prevent the passage of liquids, are excluded from this subclass.

SEE OR SEARCH THIS CLASS, SUBCLASS:

- 420, for a padded ground mat.  
 484, for waterproof bed clothing.  
 655, for infant supports that often are provided with waterproof surfaces.  
 656, for supports used outdoors that may have waterproof covers.  
 706+, for gas containing mattresses.  
 737+, for removable covers or tickings that may be made from water resistant materials.

- 939, for devices that comprise microporous materials.

SEE OR SEARCH CLASS:

- 441, Buoys, Rafts, and Aquatic Devices, subclass 128 for a waterproof mattress or cushion having (a) special features convertible to a life raft or (b) a special shape or fastening means to enable conforming to or securing a person's body.

**700 Insulating:**

This subclass is indented under subclass 690. Mattress disclosing the use of materials that are especially used to provide a thermal barrier between the user and the support of the mattress or the surrounding environment, for the purpose of minimizing heat loss from the user, thereby keeping the user warm.

- (1) Note. While most material used in making mattresses have insulating properties, with insulating properties being a matter of degree, the materials used in the patents in this subclass have been chosen especially for their insulating properties.
- (2) Note. Patents that include thermally reflecting layers, such as metals or laminates, are included in this subclass.

SEE OR SEARCH THIS CLASS, SUBCLASS:

- 413, for sleeping bags that often include insulating materials.  
 420, for ground mats.  
 656, for supports used outdoors.  
 668, for waterbeds with insulating means.  
 698, for fireproof mattresses, that can include insulating materials.  
 948+, and especially subclass 949 for wool containing devices, subclass 950 for feather or down containing devices, subclass 952 for artificial fiber containing devices, and subclass 953 for foam containing devices.

**701 Rigid plate or layer reinforced, with uniform, fixed supporting characteristics across top surface:**

This subclass is indented under subclass 690. Mattresses disclosing the use of a single firm layer or plate, or a plurality of smaller, firm elements provided within or integrally on top of the mattress, to stiffen the support characteristics of the mattress, the mattress having homogeneous or constant support characteristics across its top supporting surface.

- (1) Note. Excluded from this subclass are mattresses that have reinforcing means such as slats located only in selected portions, in order to provide different support characteristics for different portions of the mattress.

SEE OR SEARCH THIS CLASS, SUBCLASS:

727+, for mattresses that have sections of different support characteristics.

**702 Having fluent, particulate solid filler (e.g., beads):**

This subclass is indented under subclass 690. Mattresses in which at least a portion thereof is filled with a large number of small particles (e.g., beads) of particulate material, that flow or realign with respect to one another upon a user exerting pressure upon the mattress.

- (1) Note. The particulate solid may be sand, spheres of plastic, metal, ceramic, wood, beans, or other similar materials, usually enclosed in a container.
- (2) Note. Excluded from this subclass are fluidized beds, in which beads are lifted or suspended by a stream of high pressure gas.

SEE OR SEARCH THIS CLASS, SUBCLASS:

644, for support means useable with an invalid bed or surgical support filled with a fluent material.

654, for a support especially adapted to be seated on, filled with a fluent material.

655.4, for supports for a user's body or part thereof containing flowable particulate solid fillers.

689, for fluidized beds.

911, for devices containing flowable beads.

SEE OR SEARCH CLASS:

297, Chairs and Seats, subclass 452.17 for a one-piece "bean bag" type cushion.

**703 Having handle:**

This subclass is indented under subclass 690. Mattresses with a means attached thereto which can be manually grasped to facilitate manipulation of the mattress.

**704 Combined with means providing ventilation:**

This subclass is indented under subclass 703. Mattress combined with an aperture permitting circulation of air between the interior and the exterior of the mattress.

SEE OR SEARCH THIS CLASS, SUBCLASS:

724+, for mattress having ventilation means.

**705 Convertible:**

This subclass is indented under subclass 690. Mattress adapted to be converted to a device other than a mattress (e.g., usually another body supporting device such as a seat, chair, foot support, exercising device, bathing device, or the like).

- (1) Note. The mattresses in this subclass may be converted to other devices by repositioning or rearranging portions of the mattress relative to each other, possibly with adding additional structural elements to accomplish the conversion to the new device.

- (2) Note. Excluded from this subclass are mattresses that have sections that are connected or connectable to each other in a manner to permit the folding or stacking of the sections in order to save on the storage space needed or to facilitate transportation.

SEE OR SEARCH THIS CLASS, SUBCLASS:

722+, for mattresses having sections that are rearrangeable or repositionable relative to each other.

**706 Having confined gas (e.g., air mattress):**

This subclass is indented under subclass 690. Mattress including a flexible container that yieldably contains a fluid having neither independent shape nor volume but tends to expand indefinitely, usually air, to provide a yieldable supporting area for at least a portion of a user's body.

- (1) Note. While the mattress as a whole is sized to support the whole of a user's body, the gas containing flexible container may comprise only a part of the whole mattress, thereby providing support only for a selected portion of the user's body, or provide only part of the supporting structure for the whole of the user's body, with other materials (e.g., springs, foam) providing additional support for a user's body.
- (2) Note. The gas within the flexible container provides substantial support for the user, with the container being generally impervious to gases, the gas generally confined within the flexible container, and not expelled upon the weight of a user pressing on the flexible container, with the exception of subclasses 708, 712, and 713 defined below.

SEE OR SEARCH THIS CLASS, SUBCLASS:

- 644, for support means for discrete portions of a user, containing fluent material.
- 654, for supports especially adapted for seating that contain fluent materials.
- 655.3, for supports for a user's body or part thereof that are inflatable.
- 932, for seals and sealing methods used with plastic devices.

SEE OR SEARCH CLASS:

- 141, Fluent Material Handling, With Receiver or Receiver Coating Means, subclass 65 for an evacuation apparatus and subclass 114 for manipulation of flexible or collapsible receiver.
- 428, Stock Material or Miscellaneous Articles, subclass 12 for a collapsible article.

- 441, Buoys, Rafts, and Aquatic Devices, subclasses 129+ for buoyant devices that can be mattresslike devices, especially adapted (e.g., with straps) to aid a user in floating on water.

**707 Fixed amount of gas (e.g., permanently sealed container):**

This subclass is indented under subclass 706. Mattress having confined gas in which a fixed amount of gas is permanently sealed in an impervious container that lacks a valve or other means to add or release gas.

**708 With integral manual pump (e.g. foot type):**

This subclass is indented under subclass 706. Mattress having confined gas including an integral pump means, operable by the hands or feet of a user, adapted to inflate and/or deflate the mattress.

- (1) Note. The integral pump is often, but not necessarily, built into the mattress and is inseparable therefrom.
- (2) Note. The pump is a simple mechanical device, with the force that actuates the pump being supplied by the hands or feet of the user.
- (3) Note. This subclass excludes complex motor (e.g., electrical) pumps.

SEE OR SEARCH THIS CLASS, SUBCLASS:

- 714, for mattresses having variably pressured chambers, that often include complex, motor-operated pumps.

SEE OR SEARCH CLASS:

- 417, Pumps, subclasses 234+ for ambulant pump and subclasses 437+ for expandable chamber-type pump.

**709 With solid filler (e.g., foam, spring, fiber):**

This subclass is indented under subclass 706. Mattress having a confined gas in which the flexible container, in addition to a gas, contains a solid filler that provides support for a user of the mattress.

- (1) Note. This subclass includes camping mattresses that can be rolled up or compacted by expelling air from the solid

filler (e.g., porous foam) within the mattress, which the mattress, upon unrolling to its full size, will absorb air and fill up to its original uncompacted size and shape.

SEE OR SEARCH THIS CLASS, SUBCLASS:

420, for padded ground mats that may be air containing and compactible.

**710 Including plural, separately inflatable, distinct gas containing compartments:**

This subclass is indented under subclass 706. Mattress having a confined gas which comprises at least two separate and distinct containers, that can be inflated independently of each other to different pressures, and lack air supply means (e.g., pumps) that can automatically alternate or change the pressures within the containers.

- (1) Note. The separate and distinct compartments may be of any shape, are usually adjacent to each other, and have their own separate valves permitting independent inflation and deflation.
- (2) Note. Excluded from this subclass are mattresses that have a plurality of adjacent chambers including air supply means (e.g., pumps) that can automatically change or alternate the pressures within the chambers.
- (3) Note. Two adjacent gas containing mattresses that have means (e.g., valves) to separately inflate them to different pressures to form a bed that can have a firm and a less firm portion are included in this subclass.

SEE OR SEARCH THIS CLASS, SUBCLASS:

711, for mattresses having multiple compartments, defined by upper and lower surfaces, and spaced elongated dividing strips, with the compartments being in fluid communication with each other.

713, for mattresses having variably pressurizable chambers, in which fluid supply means (e.g., pumps) can auto-

matically change or alter the pressures within the chambers.

**711 Having dividing strip (e.g., parallel or slanted):**

This subclass is indented under subclass 706. Mattress having a confined gas wherein the container has an upper and lower surface when filled, and the surfaces are internally attached to each other by at least one elongated strip, or a plurality of elongated strips extending in a spaced, side-by-side fashion and dividing the mattress into a plurality of compartments that are in fluid communication with each other.

- (1) Note. The strip or strips may be vertical or slanted, must have some substantial length and height, measured across the length or width of the container to thereby divide the containers into multiple chambers that are in fluid communication with each other.
- (2) Note. Excluded from this subclass are containers that have dividing strips that divide the containers into separate and distinct compartments that are not in fluid communication with each other.

SEE OR SEARCH THIS CLASS, SUBCLASS:

682, for liquid containing, flexible containers (waterbeds) that have dividing strips or baffles that prevent the sloshing of liquid within the container.

710, for containers having dividing strips creating separate and distinct compartments that are not in fluid communication with each other.

**712 Having tie or internal seal:**

This subclass is indented under subclass 706. Mattress having a confined gas wherein an interior surface of the container is connected to another interior surface of the container at selected points or a seal line by a device that connects, fastens, or secures the surfaces.

- (1) Note. Mattresses in which the upper wall of the container is sealed, at selected points, to a lower wall of the container are included in this subclass.

SEE OR SEARCH THIS CLASS, SUB-CLASS:

682, for liquid containing, flexible containers (waterbeds) that have dividing strips or baffles that prevent the sloshing of liquid within the container.

**713 Variably pressurizable chambers (e.g., with pump):**

This subclass is indented under subclass 706. Mattress having a confined gas comprised of a plurality of inflatable chambers or cells, or groupings of chambers or cells, in which at least some of the chambers or groupings can have their support characteristics automatically changed, with the aid of air supply means, such as pumps, or some of the chambers or groupings can be alternately inflated and deflated, to thereby provide an alternately inflating and deflating supporting surface.

- (1) Note. Mattresses in this subclass either explicitly include pump means, or are designed to be used with pump means that are especially adapted to be used with mattresses of this subclass.
- (2) Note. The chambers may have slightly porous walls that permit a slow leakage of gas (e.g., air) to increase the comfort of the user; such mattresses, known as low air loss beds, are included in this subclass.

SEE OR SEARCH THIS CLASS, SUB-CLASS:

714, for inflatable mattresses with substantial ventilation or gas loss, that have a highly porous or apertured upper surface, permitting substantial gas leakage.

**714 With substantial ventilation or gas loss:**

This subclass is indented under subclass 706. Mattress having a confined gas in which at least a portion of an upper, user supporting surface of the container is made from a highly porous material, or contains apertures, that permit a substantial leakage of gas, for the purpose of cooling or warming the user, or preventing bedsores.

- (1) Note. Excluded from this subclass are mattresses having a plurality of chambers which incidentally permit the loss of gas through their porous covers (e.g., low air loss beds) and which are primarily concerned with either easily changing, alternating, or maintaining the support characteristics of a part or the whole mattress.

SEE OR SEARCH THIS CLASS, SUB-CLASS:

- 423, for devices under the class definition including heating or cooling with forced air.
- 713, for air mattresses having variably pressurized chambers that may incidentally leak gas through a porous cover.
- 726, for mattresses, other than air mattresses, that have means, such as a fan, to force ventilation.

**715 Adapted to turn or move user:**

This subclass is indented under subclass 706. Mattress having a confined gas which has a plurality of inflatable chambers that are adapted to incline, turn, or substantially move a patient from a first position to a second, different position, and possibly back to the first initial position.

- (1) Note. The substantial movement, inclining, or turning of the user is generally accomplished by inflating and/or deflating various chambers to change their size and/or shape, thereby causing the user to be substantially moved.

SEE OR SEARCH THIS CLASS, SUB-CLASS:

- 81.1+, for invalid lift and transferring devices.
- 615, for sectional invalid beds or surgical supports that comprise fluid inflatable bags adapted to adjust the position of the support section of the bed or surgical support.
- 660, for attachments or accessories that when positioned between a mattress and its supporting surface will incline the mattress or a portion thereof.

**716 Having innerspring-type core:**

This subclass is indented under subclass 690. Mattress containing a plurality of coiled wire members that provide substantial support for a user and will temporarily compress when a user's weight is placed on the mattress, the members being enclosed by an upholstery material, such as a ticking, and usually including a padding material (e.g., batting or foam) above the members and below the ticking.

- (1) Note. The patents in this subclass comprise coiled springs of the type defined by a helical strand of material.

SEE OR SEARCH THIS CLASS, SUBCLASS:

- 230+, 239+ and 246+, for a bed bottom disclosing structure framing or metallic connections of springs.  
 642, for pillow-type head supports that include springs.  
 654.1, for seat cushion-type supports comprising spring means.  
 655.7, for spring containing supports for a user's body or part thereof.  
 936, for devices having springs with adjustable firmness.

SEE OR SEARCH CLASS:

- 267, Spring Devices, subclasses 80+ for a spring panel.

**717 With substantial edge, border, or side features:**

This subclass is indented under subclass 716. Innerspring-type core mattress including ample structural elements positioned at peripheral portions of the pad to provide reinforcement, additional support, or ventilating means.

- (1) Note. Mattresses that have their edge portions reinforced to provide a sturdy area adapted to support a user sitting on the edge of the mattress are included in this subclass.

SEE OR SEARCH THIS CLASS, SUBCLASS:

- 704, and 724+, for nonspring mattresses that have ventilating features.

- 739, for nonspring mattresses having means to form or strengthen their edges or borders.

**718 Substantially filled with foam:**

This subclass is indented under subclass 716. Innerspring-type core mattress wherein an ample portion of the spaces between individual coiled wire members or group of coiled wire members are filled with an expanded cellular material, with the expanded cellular material and the members together providing support for a user upon their compression.

- (1) Note. The use of foam layers on top of the springs, or at peripheral portions of the mattress, is not sufficient for classification in this subclass.  
 (2) Note. Subject matter in this subclass are, in effect, hybrid spring and foam mattresses.

SEE OR SEARCH THIS CLASS, SUBCLASS:

- 655.7, for foam body supports not containing any springs.  
 740, for foam mattresses not containing any springs, that have an unusual foam, or having conventional foams configured in an unconventional way.

**719 Noncoil spring element:**

This subclass is indented under subclass 716. Innerspring-type core mattress in which at least one of the spring elements, providing support for a user of the pad, is a form different than the wire member of the helical strand-type material.

- (1) Note. The incidental use of a noncoil spring (for example, interconnecting a plurality of coil springs), wherein the noncoil spring does not compress and provides support for a user, is not sufficient for classification in this subclass.

SEE OR SEARCH THIS CLASS, SUBCLASS:

- 247, and 255, for nonspiral springs used in bedsteads.

## SEE OR SEARCH CLASS:

267, Spring Devices, subclasses 113+ for fluid springs.

**720 Compartmentalized:**

This subclass is indented under subclass 716. Innerspring-type core mattress in which the coiled wire core is made up of individual coiled wire members or small groups of coiled wire members separated by partitions.

- (1) Note. Usually individual or small groups of springs are enclosed in a clothlike cover to isolate the individual springs, or group of springs from other springs.

## SEE OR SEARCH THIS CLASS, SUBCLASS:

655.8, for body supports comprising compartmentalized spring devices.

**721 With substantial, firm, top insulator or reinforcing grid on spring core:**

This subclass is indented under subclass 716. Innerspring-type core mattress including (a) a relatively hard separator between the coiled wire member core and the pad ticking to prevent the coiled wire members within the core from penetrating the surface or (b) including a hard element such as a wire grid or rigid board to provide reinforcement for at least a portion of the top supporting surface spaced from the periphery of the pad.

## SEE OR SEARCH CLASS:

267, Spring Devices, subclasses 83+ for superposed layers, metal and non-metal.

**722 With distinct movable sections:**

This subclass is indented under subclass 690. Mattress having discrete portions that can be repositioned relative to each other as by bending, folding, sliding, replacing, or temporarily removing the portion, to thereby change the shape, size, or thickness configuration or support characteristics of the pad.

- (1) Note. Mattresses that have removable inserts such as slats, plates, or plugs, used to change the firmness of the mattress are classified elsewhere.

- (2) Note. This subclass includes large, multiple user accommodating mattresses that are formed from two smaller mattresses connected with a connector element or housed within a large, enveloping or framing structure.

- (3) Note. This subclass includes mattresses that have removable or repositionable portions or sections that provide a cavity over which a portion of a user's body may be supported without being contacted by supporting materials to thereby prevent or alleviate bed sores.

- (4) Note. This subclass includes mattresses with means to facilitate folding or rolling up.

- (5) Note. This subclass includes mattresses with a malleable bar, or the like embedded within the mattress and adapted to be bent to thereby change the shape of the mattress.

## SEE OR SEARCH THIS CLASS, SUBCLASS:

661, for a removably connectable bed attachment that is adapted to extend the head or foot portion of a bed.

691, for a separate and distinct mattress that may be supported on or removably attached to another mattress.

694+, for mattresses that contain or accommodate disparate articles (such as a bedpan) often by providing a removable mattress section.

697, for mattresses having uniform firmness across their supporting surface, that have means to adjust their firmness.

706+, for inflatable gas containing mattresses that may have distinct movable sections.

729+, for mattresses that have removable slats, plates, plugs, slits, grooves cut-outs or cavities provided to alter the firmness of a portion of the mattress.

738, for mattresses having easily openable covers or tickings that permit the addition or removal of filling materials.

- 922, for devices that use hook-and-loop-type fasteners.
- 723 With separable fastener for connection to each other or to base:**  
This subclass is indented under subclass 722. Distinct movable mattress section in which the separate portions of the pad have a detachable coupler to permit release from each other to a foundation or foundation portion.
- SEE OR SEARCH THIS CLASS, SUBCLASS:  
691, for mattresses supported on or removably attachable to another mattress.
- SEE OR SEARCH CLASS:  
24, Buckles, Buttons, Clasps, etc., subclasses 572+ for separable fastener or required component thereof.
- 724 Ventilated or permitting substantial air passage:**  
This subclass is indented under subclass 690. Mattresses having an aperture or channel permitting circulation of a gas (e.g., air) between the interior and exterior to enhance the comfort of a user.
- (1) Note. The aperture or channel means in the mattress must permit substantial movement in and out of the mattress. The use of a porous cover or ticking on a mattress, or the use of a conventional porous foam as the filler, that inherently permit movement of air through their pores, is not sufficient for classification in this subclass.
- (2) Note. Excluded from this subclass are slits, grooves, or cutouts on a mattress surface provided for localized altering of the firmness of the mattress.
- (3) Note. Excluded from this subclass are mattresses with channels, grooves, peaks, or valleys on a mattress top surface that may inherently provide a ventilation user supporting top surface.
- SEE OR SEARCH THIS CLASS, SUBCLASS:  
652.1+, for supports with ventilation or forced ventilation.
- 704, for mattresses in which the handle means are provided with means providing ventilation.
- 716, for spring mattresses that have edge or border features that may include ventilating means.
- 727, for slits, grooves, or cutouts on a mattress surface provided for localized altering of the firmness of the mattress.
- 730, and 736, for channels, grooves, peaks, or valleys on a mattress top surface that may inherently provide a ventilation user supporting top surface.
- SEE OR SEARCH CLASS:  
297, Chairs and Seats, subclasses 180.1+ for ventilated chairs and seats.
- 725 In head supporting area for breathing:**  
This subclass is indented under subclass 724. Ventilated mattress wherein apertures or channels are provided in the human skull bearing portion of the pad to facilitate respiration of a generally prone user.
- (1) Note. Included in this subclass are mattresses provided with ventilating apertures in their head supporting area to prevent suffocation of infants.
- SEE OR SEARCH THIS CLASS, SUBCLASS:  
638, for pillow-type devices that have means permitting the passage of air for breathing.  
655, for supports especially adapted for supporting infants.
- 726 With means to force ventilation (e.g., fan):**  
This subclass is indented under subclass 724. Ventilated mattress including means such as a fan or air pump to propel air into or out of the pad.
- (1) Note. Excluded from this subclass are air mattresses.
- SEE OR SEARCH THIS CLASS, SUBCLASS:  
423, for devices to force heated or cooled air.  
652.2, for cushion supports with forced ventilation.

- 713+, for air mattresses that may incidentally ventilate a user.
- 941, for blankets that provide a forced air flow to a user.

SEE OR SEARCH CLASS:

- 297, Chairs and Seats, subclass 180.13 for seats and chairs ventilated with forced air.

**727 Sectional with regard to firmness:**

This subclass is indented under subclass 690. Mattress having a body supporting section with a different compressibility or body support characteristics from another section either lengthwise, widthwise, or heightwise of the pad.

- (1) Note. The mattresses in this subclass generally have a planar top supporting surface and generally provide a firmer portion for the heavier midsection of the human body, or in the case of a mattress adapted to support two users, one longitudinal section of the mattress may be less firm than the adjacent longitudinal section to provide a softer portion for one of the users.
- (2) Note. Included in this subclass are reversible mattresses that have plural homogeneous layers of different support characteristics, one on top of the other.
- (3) Note. Excluded from this subclass are inflatable mattresses that have sections inflatable to different firmnesses.

SEE OR SEARCH THIS CLASS, SUBCLASS:

- 710, especially subclass 714, for inflatable mattresses that have sections inflatable to different firmnesses.
- 716+, for spring containing mattresses that have sections with different firmnesses.

**728 Comprising horizontal firm slatlike or plate-like inserts:**

This subclass is indented under subclass 727. Sectional firmness mattress containing permanent or removable, generally rigid slats or plates positioned only in selected portions of

the mattress to selectively alter the firmness of the mattress.

SEE OR SEARCH THIS CLASS, SUBCLASS:

- 701, for mattresses with homogeneous or constant support characteristics across its top surface that contain rigid plates.

**729 Comprising vertically oriented insert:**

This subclass is indented under subclass 727. Sectional firmness mattress including permanent or removable, generally upright arranged stiffening inserts or plugs that are usually cylindrical.

**730 Comprising a firmness altering slit, groove, cutout, or cavity:**

This subclass is indented under subclass 727. Sectional firmness mattress in which a narrow aperturelike portion is provided on the pad top supporting surface, or through the mattress in order to provide supporting portions of different characteristics in the pad.

SEE OR SEARCH THIS CLASS, SUBCLASS:

- 724, for mattresses with channels provided inside the mattress to facilitate ventilation by providing a path for air to move in and out of the mattress.
- 736, for mattresses having hills or peaks, separated by valleys.

**731 Nonplanar top surface:**

This subclass is indented under subclass 690. Mattress in which a portion of the user contact area has discreet protuberances and indents.

- (1) Note. The mattresses in this subclass provide at all times a nonplanar supporting surface and do not have adjustable and repositionable sections that can transform the nonplanar or contoured top surface to a planar top surface.
- (2) Note. Excluded from this subclass are invalid beds and surgical supports that may present nonplanar invalid supporting surfaces.
- (3) Note. Excluded from this subclass are support means, such as pillowlike

devices that are removably useable on top of a mattress (or other body supports).

SEE OR SEARCH THIS CLASS, SUB-CLASS:

- 600+, for invalid beds and surgical supports that may present nonplanar invalid supporting surfaces.
- 630+, for support means, such as pillowlike devices that are removably useable on top of a mattress (or other body supports).
- 694+, for mattresses with disparate article (such as a bedpan) that may have cavities or the like to accommodate disparate articles.
- 706+, for air mattresses that may present a nonplanar user supporting surface.
- 722+, for mattresses with distinct adjustable or repositionable sections, in which sections may be manipulated to alter the mattress top from a planar to a nonplanar mode.
- 730, for mattresses that are sectional with regard to firmness that have slits, grooves, cutouts, or cavities to alter their firmness.
- 944, for devices that have upstanding firm projections.

**732 With sideguard:**

This subclass is indented under subclass 731. Nonplanar mattress surface which has a substantial raised peripheral portion, usually at least at one side thereof, usually to prevent a user from rolling off the pad.

SEE OR SEARCH THIS CLASS, SUB-CLASS:

- 424, for safety devices.
- 425+, for sideguards useable with beds.
- 655+, for supports especially adapted for infants.

**733 With head, back, or arm support:**

This subclass is indented under subclass 731. Nonplanar mattress top surface in which the pad accommodates a user's upper torso portion or extremities, often in a raised or lowered configuration relative to other body portions of the user.

SEE OR SEARCH THIS CLASS, SUB-CLASS:

- 621+, for invalid beds or surgical supports with upper body supporting or restraining areas.
- 632+, for simultaneous supporting devices for multiple body portions that are removably positionable on the top surface of a mattress or other body support.
- 638, for head or neck support with means to permit the passage of air for breathing.
- 646+, for arm or hand supports.
- 725 for ventilated mattresses providing means in the head supporting area of the mattress for breathing by a prone user.

**734 With foot or leg support:**

This subclass is indented under subclass 731. Nonplanar mattress top surface in which the pad accommodates a user's lower torso or extremities, often in a raised or lowered configuration relative to other body portions of the user.

SEE OR SEARCH THIS CLASS, SUB-CLASS:

- 624, for invalid beds or surgical supports with lower body portion supporting or restraining means.
- 648+, for lower body supporting devices that are removably positionable on the top surface of a mattress or other body support.

**735 With abdomen or breast support:**

This subclass is indented under subclass 731. Nonplanar mattress top surface in which the user contacting face accommodates a protruding midsection or mammary section.

- (1) Note. This subclass includes mattresses especially adapted to support a pregnant user.

SEE OR SEARCH THIS CLASS, SUB-CLASS:

- 631, for pregnant abdomen supporting devices that are removably positionable on a mattress or other body support.

930, for devices for pregnant users.

**736 With hills or peaks separated by valleys (e.g., egg crate type):**

This subclass is indented under subclass 731. Nonplanar mattress top surface in which at least a portion of the user contacting face has a pattern of protuberances totally surrounded on all sides by lowered surfaces, defining a surface that resembles an egg crate.

- (1) Note. Hills or peaks may have rounded or flat tops and are often made by a foam convoluter.
- (2) Note. Excluded from this subclass are mattresses that have surfaces in which raised portions are separated by closely spaced, parallel, lateral, or longitudinal (but not both lateral and longitudinal) grooves or slits, to thereby provide an undulating surface.

SEE OR SEARCH THIS CLASS, SUBCLASS:

- 691, for mattresses or pads, removably attachable to the top of another mattress, that may provide an egg-crate-type supporting surface.
- 724, for mattresses providing ventilation, that may provide an egg-crate-type surface.
- 731, for surfaces in which raised portions are separated by lateral or longitudinal (but not both) grooves or slits, to thereby provide an undulating surface.
- 944, for devices that have upstanding, firm massaging projections on their top user supporting surface.

**737 Having atypical outer covering or ticking:**

This subclass is indented under subclass 690. Mattress containing a specific property or material of the exposed surface of the pad that surrounds the inner core.

- (1) Note. This subclass is for unconventional and unusual material for single or multiple coverings or tickings, or the manner in which the covering or ticking is attached to the mattress, or the configuration (e.g., extreme looseness) of the covering relative to the mattress core.

- (2) Note. This subclass excludes merely conventional waterproof coverings, conventional fireproof coverings, or conventional tufted coverings.

SEE OR SEARCH THIS CLASS, SUBCLASS:

- 402+, for the combination of a bottom and an upholstered pad (i.e., mattress or cushion) which has means to hold the upholstery to the bottom or pad.
- 484, for waterproof covering.
- 490, for pillow covers.
- 501, for coverings for bedclothes.
- 655.6, for cushion-type supports, in which the covering is attached to the core by tufting.
- 696, for tufted mattresses, in which a covering is attached to a mattress core by tufting.
- 698, for mattresses with fireproof materials, in which the covering may have fireproof properties.
- 699, for waterproof mattresses, in which the covering of the mattress is usually waterproof.
- 738, for mattresses having tickings that are easily openable for the addition, removal, or replacement of filler materials.
- 739, for edge, corner, or border features, such as edge rolls, that may be provided on a mattress cover or ticking.
- 939, for devices that have a microporous cover.

**738 With easily openable cover or ticking:**

This subclass is indented under subclass 690. Mattress in which the cover or ticking is especially adapted for quick access to permit removal, replacement, or addition to at least part of the inner core of the pad.

- (1) Note. The cover or ticking usually includes separable fasteners that permit easy opening and closing of the cover or ticking.
- (2) Note. Unlike the mattresses with distinct movable sections, where whole separate and distinct sections or units are removable from the mattress, a mattress placed in this subclass is not formed from separable sections.

rate and distinct sections or units, but is filled with a homogeneous "stuffing" material or the whole inner core is removable through the openable cover or ticking.

SEE OR SEARCH THIS CLASS, SUBCLASS:

- 490, for pillowcases that usually have an opening permitting the insertion and removal of the pillow.
- 501, for coverings that usually have an opening permitting the insertion and removal of a bedclothing item such as a quilt.
- 722, for mattresses having separate and distinct sections, movable within the mattress, or removable from the mattress.

**739 Having substantial means to form or strengthen the edge, border, or corner of the mattress:**

This subclass is indented under subclass 690. Mattress having a substantial structural feature, internally or externally, that forms the peripheral portion of the pad to reinforce this portion or to provide aesthetic features to the portions.

- (1) Note. Included in this subclass are edge rolls and piping provided at the peripheral edges of a mattress cover.
- (2) Note. Excluded from this subclass are mattresses having bedclothes retaining means, mattresses having handles, inner-spring core-type mattresses having substantial edge or side features, and mattresses having sideguards.

SEE OR SEARCH THIS CLASS, SUBCLASS:

- 657.5, for body supports with edge roll, cord, or welt.
- 692, for mattresses having bedclothes retaining means.
- 703, for mattresses having handles.
- 717, for inner-spring core-type mattresses having substantial edge or side features.
- 732, for mattresses having sideguards.

**740 With unusual foam material or configuration:**

This subclass is indented under subclass 690. Mattress in which at least part of the mattress is composed of an expanded cellular substance having unconventional physical or chemical properties.

- (1) Note. Since expanded cellular foams are conventional materials of construction for mattresses, classification in this subclass requires some inherently unconventional chemical or physical property of the foam, or the foam must have been modified by the addition of other materials to exhibit an unconventional physical or chemical property.
- (2) Note. Unusual foam configurations can include the use of chunks, chips, layers, blocks, or unusual shapes and sizes of conventional foams, or an unusual aggregation, such as layering of conventional foams.

SEE OR SEARCH THIS CLASS, SUBCLASS:

- 655.9, for cushion-type supports comprising foam materials.
- 953, for body supports having unusual foam material or configuration.

SEE OR SEARCH CLASS:

- 297, Chairs and Seats, digest 1 for chair- and seat-type devices that have foam components.
- 428, Stock Material or Miscellaneous Articles, subclasses 304.4+ for composite material having voids in a component.

CROSS-REFERENCE ART COLLECTIONS

**900 BATHTUB OR BED:**

Collection of documents disclosing beds which are convertible to a bathtub.

SEE OR SEARCH CLASS:

- 4, Baths, Closets, Sinks, and Spittoons, subclasses 571.1+ for tubs having various supports combined therewith.

**901 MATTRESS OR PAD WITH A CONVOLUTED (E.G., EGG CRATE) SURFACE:**

A collection of documents under 900.5, wherein at least a portion of the supporting surface comprises a pattern of protrusions, or bumps and valleys, or cavities that simulates the shape of the lower portion of an egg container.

- (1) Note. Most of the patents in this collection are supports made by cutting a foam slab with a convoluter.

SEE OR SEARCH THIS CLASS, SUBCLASS:

740, for mattresses comprising foam material.

**902 MATTRESS WITH NONRECTANGULAR SUPPORTING SURFACE:**

A collection of documents disclosing supports for substantially the whole body of a user in which the shape, seen in a top view, of the supporting surface is not of the conventional rectangular shape.

- (1) Note. The supporting surface, in a top view may be circular, oval, square, heart shaped, etc.

SEE OR SEARCH CLASS:

D6, Furnishings, subclasses 595+ for design features relating to mattresses.

**904 WITH SOUND EMITTING MEANS:**

This subclass is indented under the class definition. A collection of documents disclosing sound emitting means associated with a device.

- (1) Note. The sound emitting device may be a speaker, a music box, or a toy, that makes an audible sound.
- (2) Note. A TV set, which has a speaker built into it would be included in this collection.

SEE OR SEARCH THIS CLASS, SUBCLASS:

639, for pillows with disparate articles, including sound emitting devices.

666, for waterbeds with sound or light means.

SEE OR SEARCH CLASS:

381, Electrical Audio Signal Processing Systems and Devices, subclasses 300+ for stereo speaker arrangement.

**905 WITH LIGHT EMITTING MEANS:**

This subclass is indented under the class definition. A collection of documents disclosing light emitting means associated with a device .

- (1) Note. The light emitted may be sufficient to permit an activity such as reading or it may be merely enough for amusement, such as rapidly flashing tiny lights, strobe lights or phosphorescent strips.

SEE OR SEARCH THIS CLASS, SUBCLASS:

666, for waterbeds with sound or light means.

SEE OR SEARCH CLASS:

362, Illumination, subclass 130, for illuminating devices useable with beds.

607, Surgery: Light, Thermal, and Electrical Application, subclasses 1+ for lights used for therapeutic purposes for patients supported on a bed.

**906 WITH MAGNETIC MEANS:**

This subclass is indented under the class definition. A collection of documents disclosing a permanent magnet or an electro-magnet associated with a device.

- (1) Note. The presence of a magnet that is part of a motor associated with the device is not sufficient to bring the document in this collection.

SEE OR SEARCH THIS CLASS, SUBCLASS:

693, for mattresses with magnetic means.

SEE OR SEARCH CLASS:

600, Surgery, subclasses 9+ for magnetic devices used for therapy.

**907 WITH DECORATIVE STRUCTURE:**

This subclass is indented under the class definition. A collection of documents disclosing a structural element, associated with a device, with a primarily decorative function.

- (1) Note. A color scheme or design on a device is not sufficient of a “structural element” to bring a document in this collection.

SEE OR SEARCH THIS CLASS, SUB-CLASS:

280, for bedstead with ornamental inserts.

SEE OR SEARCH CLASS:

D6, Furnishings, appropriate subclasses for ornamental structures associated with devices under the class definition.

**908 Mirror:**

This subclass is indented under subclass 907. A collection of documents disclosing the use of a mirror associated with a device of the class.

SEE OR SEARCH THIS CLASS, SUB-CLASS:

280, for bedstead with a mirror.

SEE OR SEARCH CLASS:

297, Chairs and Seats, subclass 185, with mirror.

312, Supports: Cabinet Structure, subclasses 224+ for cabinets with mirrors.

**909 FLOWABLE VISCOUS (E.G., GEL) MATERIAL CONTAINING:**

A collection of documents disclosing a viscous or gel-like fluid associated with a device of the class.

- (1) Note. The fluid must be more viscous than water and it is usually a liquid with or without additives to make it more viscous than water.

SEE OR SEARCH THIS CLASS, SUB-CLASS:

644, for support means useable with an invalid bed or surgical support, filled with a fluent material.

654, for a support especially adapted to seated on, filled with a fluent material.

655.5, for supports containing liquid or gel.

706+, for mattresses filled with fluent materials.

**910 WITH SUCTION MEANS:**

A collection of documents disclosing gas suction means associated with a device of the class.

- (1) Note. This collection includes supports in which the firmness or size of the support is adjustable by withdrawing a gas from the support.

- (2) Note. The collection excludes supports in which the support is filled with beads or with a liquid.

SEE OR SEARCH THIS CLASS, SUB-CLASS:

913, for suction means associated with a bead containing support.

918, for waterbeds having pumps adapted to circulate the liquid in the bed.

**911 BEAD CONTAINING:**

A collection of documents disclosing a body support having at least a portion thereof filled with a large number of small particles of particulate solid material, that adapted to “flow” relative to one another as a fluent material.

- (1) Note. The particulate solid may be sand, spheres of plastic, metal, ceramic, wood etc., beans or other similar materials, usually enclosed in a container.

SEE OR SEARCH THIS CLASS, SUB-CLASS:

644, for support means useable with an invalid bed or surgical support, filled with a fluent material.

654, for a support especially adapted to be seated on, filled with a fluent material.

689, for fluidized beds.

702, for mattresses filled with solid fluent materials.

**913 BEAD CONTAINING AND SUCTION MEANS:**

This subclass is indented under the class definition. A collection of documents having a suction means, such as a pump, to remove the air from an impermeable container filled with “beads” thereby preventing the movement of the “beads”, thus rigidifying the container.

- (1) Note. This collection includes body supports filled with beads that can be custom fitted to a particular user by placing the user on a “bead” filled impermeable container, permitting the beads to rearrange themselves under the weight of the user, and applying a suction to the container, thereby “setting” the beads in an arrangement adapted to the contour of the body of the particular user.
- 915 WITH VIBRATING MEANS:**  
This subclass is indented under the class definition. A collection of documents disclosing a vibrator associated with a device.
- SEE OR SEARCH THIS CLASS, SUBCLASS:  
108, and 109, for cradles with rocking means.  
674, for waterbeds with vibrating means.
- SEE OR SEARCH CLASS:  
601, Surgery: Kinesitherapy, subclasses 49+ for vibrating devices used for therapeutic purposes.
- 922 WITH HOOK AND LOOP TYPE FASTENER:**  
This subclass is indented under the class definition. A collection of documents disclosing the use of hook and loop type fasteners.
- 923 Bedclothing:**  
This subclass is indented under subclass 922. A collection of documents disclosing the use of hook and loop type fasteners with a bedclothing item such a sheet, blanket or pillowcase.
- SEE OR SEARCH THIS CLASS, SUBCLASS:  
482+, for specific bedclothing items.
- SEE OR SEARCH CLASS:  
24, Buckles, Buttons, Clasps, etc., subclass 72.5 for bedclothes fasteners, and other appropriate subclasses.  
297, Chairs and Seats, Digest 6, for hook and loop type fasteners used with chairs and seats.
- 924 CARDBOARD CONTAINING:**  
This subclass is indented under the class definition. A collection of document disclosing the use of cardboard as the material of construction of at least a portion of a device.
- SEE OR SEARCH THIS CLASS, SUBCLASS:  
951, for paper containing devices.
- 925 HIGHLY FRICTIONAL MATERIAL:**  
This subclass is indented under the class definition. A collection of documents disclosing the use of a rough material that provides a lot of friction, in association with a device, or in constructing at least a portion of a device under the class definition.
- (1) Note. The use of a conventional frictional material in a brake portion of a caster wheel used with a device under the class definition would not be sufficient to bring the document in this collection.
- 926 LOW FRICTION (E.G., SLIPPERY) MATERIAL:**  
This subclass is indented under the class definition. A collection of documents disclosing the use of a slippery material that provides a very low friction, in association with a device , or in making at least a portion of a device under the class definition.
- (1) Note. The use of a conventional low friction material, such as a nylon bushing, between the moving parts of a motor used with a device under the class definition would not be sufficient to bring the document into this collection.
- 927 SOFA BEDS WITH MOTOR MEANS:**  
A collection of documents disclosing the use of motor means in operating portions of sofa beds in subclasses 12.1 to 50 of Class 5.
- 928 WITH SPRINKLING OR WASHING MEANS:**  
This subclass is indented under the class definition. A collection of documents disclosing the use of water in sprinkling or washing the user of a device supported on a support.

- (1) Note. The sprinkling of a user is usually to cool or amuse the user.

SEE OR SEARCH THIS CLASS, SUB-CLASS:

- 633, for invalid beds or surgical supports with drain means.  
656, for body supports especially adapted for outdoor use.

SEE OR SEARCH CLASS:

- 4, Baths, Closets, Sinks, and Spittoons, appropriate subclasses for bathing and showering devices.  
239, Fluid Sprinkling, Spraying, and Diffusing, appropriate subclasses, for sprinkling devices.

**929 FACILITATING SEXUAL RELATIONS:**

This subclass is indented under the class definition. A collection of documents disclosing the use of devices which are particularly adapted to support at least a portion of at least one user to facilitate sexual relations.

- (1) Note. Conventional devices under the class definition, such as conventional beds or pillows, which are inherently adapted to facilitate sexual relations, are to be excluded from this collection.

**930 FOR PREGNANT USER:**

This subclass is indented under the class definition. A collection of documents disclosing the use of a device especially adapted to support or comfort a pregnant user.

SEE OR SEARCH THIS CLASS, SUB-CLASS:

- 631, for support means, adapted to be used with a bed or surgical support, which are adapted to support the abdomen of a pregnant user.  
735, for mattresses having abdomen (or breast) supports.

**931 WITH SAFE OR HIDING PLACE:**

This subclass is indented under the class definition. A collection of documents disclosing the use of a safe or concealed hiding place, for valuables, in a device.

- (1) Note. A mere storage space such as a drawer or an unconcealed pocket would not be sufficient to bring the document in this collection.

SEE OR SEARCH THIS CLASS, SUB-CLASS:

- 58, for sofa beds with receptacles drawers or compartments.  
308, for bedsteads with receptacles drawers or compartments.  
485, for bedclothing items with pocket means.

SEE OR SEARCH CLASS:

- 109, Safes, Bank Protection, or a Related Device, appropriate subclasses, for safes.  
312, Supports: Cabinet Structure, for devices with secret compartments.

**932 SEALS AND SEALING METHODS, FOR PLASTICS:**

This subclass is indented under the class definition. A collection of documents disclosing seals and sealing methods used in joining portions of plastic devices.

- (1) Note. The seals are usually portions of inflatable or water fillable devices under the class definition, and the methods of sealing are usually ultrasonic or dielectric sealing methods or solvent bonding.

SEE OR SEARCH CLASS:

- 156, Adhesive Bonding and Miscellaneous Chemical Manufacture, appropriate subclasses for sealing methods.

**933 MASSAGING BED:**

This subclass is indented under the class definition. A collection of documents disclosing a device that have discrete, generally rigid portions, that move cyclically relative to the user, to thereby massage at least a portion of the user's body.

SEE OR SEARCH THIS CLASS, SUB-CLASS:

- 108, and 109, for cradles with rocking devices.  
915, for supports with vibrating means.

- 944, for upstanding firm massaging projections.
- SEE OR SEARCH CLASS:  
601, Surgery: Kinesitherapy, subclasses 49+ for vibrating device used for therapeutic purposes.
- 934 With movable transverse slats:**  
This subclass is indented under subclass 933. A collection of documents in which the discrete, generally rigid, movable portions are elongated elements that extend from one edge portion of the bed towards its other edge and are generally perpendicular to the longitudinal axis of the bed.
- 935 WITH ADJUSTABLE FIRMNESS:**  
This subclass is indented under the class definition. A collection of documents disclosing the use of body supports, with at least a portion of the user supporting surface of the body support having a variable or adjustable support characteristic, firmness or hardness, with the support characteristic, firmness or hardness changeable from one fixed value to another fixed value.
- (1) Note. Fluent material fillable supports, such as air inflatable mattresses, which are inherently adapted to have their firmness varied, by inflation or deflation, are excluded from this collection.
- (2) Note. Supports with removable or replaceable stiffening means such as stiffening boards or rods are excluded from this subclass.
- 936 HAVING SPRINGS WITH ADJUSTABLE FIRMNESS:**  
This subclass is indented under the class definition. A collection of documents comprising spring devices that have variable or adjustable support characteristics, with the support characteristics of the spring changeable from one fixed value to another fixed value.
- SEE OR SEARCH THIS CLASS, SUBCLASS:  
697, for mattresses with uniform firmness that is changeable by the user.  
716+, for mattresses having innerspring-type cores.
- SEE OR SEARCH CLASS:  
267, Spring Devices, subclass 177 for coil springs including an adjustable end thrust member to vary the thrust reaction.
- 937 BODY SUPPORT WITH LOWERABLE SUPPORT PORTION TO PROVIDE ACCESS TO A PORTION OF THE SUPPORTED BODY:**  
This subclass is indented under the class definition. A collection of documents disclosing the use of body supports which include a body supporting portion that is lowerable relative to a portion of the user's body to provide access to the user's body for inspection or treatment.
- 938 WITH REFLECTIVE MATERIAL:**  
A collection of documents disclosing a light or heat reflective material associated with a device of the class.
- (1) Note. This collection includes devices in which the reflective material is adapted to reflect sunrays to promote the tanning of a user.
- (2) Note. This collection includes the use of thermally reflective materials which reflect the body heat of a user to thereby keep the user warm.
- (3) Note. This collection excludes mirrors.
- SEE OR SEARCH THIS CLASS, SUBCLASS:  
417+, for ground mats.  
483, for fireproof bedclothing that may include thermally reflective materials.  
656, for supports especially adapted for outdoor use.  
668, for waterbeds with insulating means that may include thermally reflective materials.  
700, for mattresses with insulating means.
- 939 WITH MICROPOROUS MATERIAL:**  
A collection of documents disclosing the use of a material, usually covering or enclosing a device of the class, that have microscopic pores severely limiting the passage of solids or liquids through said materials.

- (1) Note. This collection includes covers that permit the passage of air, but not the passage of an allergen such as dust, mites, and mite feces.
- (2) Note. This collection includes covers that severely limit the rate of passage of vapors through the cover.

SEE OR SEARCH THIS CLASS, SUB-CLASS:

- 482+, for bedclothing such as a pillow case, sheet, etc.
- 689, for a fluidized bed in which covers that are porous to gases, such as air, cover small fluidized beads.
- 699, for mattresses that have a waterproof or allergenproof outer surface.
- 737, for a mattress cover.

**940 WITH ALARM MEANS:**

This subclass is indented under the class definition. A collection of documents disclosing the use of a device, emitting an audio or visual signal to wake up an occupant of a bed or when certain conditions are reached.

- (1) Note. The conditions that activate the alarm include the removal or departure of the user of a bed, the reaching of a preset temperature, pressure of humidity condition, or the slipping or removal of a bedclothing item.

SEE OR SEARCH THIS CLASS, SUB-CLASS:

- 658, for attachments or accessories used with a bed.

SEE OR SEARCH CLASS:

- 340, Communications: Electrical, subclasses 568.1+ for article placement or removal indicating system; and subclasses 573.1+ for human indicating system, especially subclass 575 for sleep indicating system.

**941 BLANKET WITH FORCED AIR FLOW:**

A collection of documents disclosing the use of generally flexible human body covers, such as blankets, that provide a flow of pressurized air, for the purpose of ventilating, heating, or cooling a user.

SEE OR SEARCH THIS CLASS, SUB-CLASS:

- 423, for devices that provide a flow of forced air for heating or cooling.
- 726, for ventilating mattresses with means to force ventilating air.

SEE OR SEARCH CLASS:

- 128, Surgery, subclass 847 for body protecting devices with fluid supply.
- 607, Surgery: Light, Thermal, and Electrical Application, subclasses 104+, especially subclass 107, for thermal applicators.

**942 LONGITUDINALLY DIVIDED TOP SURFACE WITH PIVOTABLE SECTION:**

A collection of documents disclosing body supporting top surfaces that are composed of at least two adjacent longitudinal sections that are pivotally adjustable relative to each other whereby a generally planar supporting surface can be changed to a nonplanar surface with at least one of the plurality of adjacent longitudinal sections being at an angle to other longitudinal sections which support a reclining user.

SEE OR SEARCH THIS CLASS, SUB-CLASS:

- 37.1+, for sofa beds in which a back supporting section can be pivoted 90° relative to a fixed bed portion to thereby widen the bed surface.
- 600+, for invalid beds or surgical supports.

**943 WITH HORIZONTALLY MOVABLE TOP SURFACE:**

A collection of documents disclosing user supporting, generally horizontal top surface portions that are adapted to move longitudinally or laterally relative to a base portion, to move the user relative to the base portion, the top portion adapted to be returned to its initial position, which is centered relative to its supporting base portion.

- (1) Note. The movable top portions often move a patient into a cavity in an examining or treating device (e.g., for X-raying) and return the patient to the initial position after examination or treatment.

SEE OR SEARCH THIS CLASS, SUB-CLASS:

81.1+, for invalid lift and transfer devices.  
600+, for invalid beds or surgical supports.

SEE OR SEARCH CLASS:

108, Horizontally Supported Planar Surfaces, subclasses 102+ for horizontally adjustable surfaces.

**944 WITH UPSTANDING FIRM MASSAGING PROJECTIONS:**

A collection of documents disclosing the use of a plurality of generally rigid projections on a body supporting surface to provide a massaging of a body resting on said projections.

- (1) Note. This collection excludes nonplanar body supports in which soft body accommodating projections of foam or the like are adapted to be substantially deformed by a user resting thereon.

**945 INFLATABLE BABY SUPPORT WITH INFLATABLE PERIPHERAL GUARD:**

A collection of documents disclosing the use of inflatable enclosures, such as a crib, having an integral inflatable side or end guard that is generally used to safely support an infant.

- (1) Note. This collection excludes inflatable mattresses that are combined with noninflatable peripheral guards.

SEE OR SEARCH THIS CLASS, SUB-CLASS:

93.1+, for a crib.  
644, for an inflatable pillow.  
655, for a support especially adapted for infant support.  
706+, for an inflatable mattress.

**946 CRIB BUMPER:**

A collection of documents disclosing the use of a soft, flexible, generally vertical protective device covering a substantial portion of the inner side and end walls of a crib, for the purpose of protecting the user of the crib from bumping against the generally rigid side or end walls (e.g., rails) of the crib.

- (1) Note. The crib bumpers are generally removably positioned relative to the rails

of the crib with the aid of fasteners such as strings.

SEE OR SEARCH THIS CLASS, SUB-CLASS:

93.1, for cribs.  
424, for safety devices.  
663, for rail or frame protecting devices.

SEE OR SEARCH CLASS:

248, Supports, subclass 345.1 for bumper or scuff plate used with supports of general utility.

**947 WALL MOUNTED BABY CHANGER:**

A collection of documents disclosing the use of wall mounted supports adapted to temporarily support a baby during diaper changes with a baby supporting portion adapted to pivot from a stored vertical position to a horizontal use position.

SEE OR SEARCH THIS CLASS, SUB-CLASS:

655, for supports especially adapted for infant support.

SEE OR SEARCH CLASS:

211, Supports: Racks, subclasses 189+ for knockdown type.  
312, Supports: Cabinet Structure, subclass 348.1 for knockdown or setup type.

**948 BODY SUPPORT WITH UNIQUE, SPECIFIC FILLER MATERIAL:**

A collection of documents disclosing the use of body supports comprising specific filler materials other than springs, conventional foams, air, water, gas, or flowable beads.

- (1) Note. This collection includes unconventional filler materials within supports for the body or body portions, used to provide support, with any other function being incidental to the body supporting function.

SEE OR SEARCH THIS CLASS, SUB-CLASS:

413, for a sleeping bag.  
636+, for a pillow.  
652+, for a cushion.  
690+, for a mattress.

- coated or structurally defined fiber, and subclass 903 for microfiber.
- 949 Comprising animal derived product:**  
A collection of documents under art collection 948 disclosing the use of animal derived products such as the hair of various animals (e.g., wool) or products made by worms such as silk.
- SEE OR SEARCH THIS CLASS, SUB-CLASS:  
500, and 502, for multilayered bedclothes, such as blankets or quilts.
- SEE OR SEARCH CLASS:  
428, Stock Material or Miscellaneous Articles, subclass 16 for treated fauna.
- 950 Comprising feathers or down:**  
A collection of documents under art collection 949 disclosing the use of bird plumage.
- (1) Note. The feathers or down, used by themselves or mixed with other materials, are chosen primarily for their good thermal insulating characteristics.
- 951 Comprising plant derived material:**  
A collection of documents under art collection 948 in which the filler material includes natural flora products such as cotton, coconut fiber, straw, grass, etc.
- (1) Note. Paper, which is cellulose based, is included in this collection.
- SEE OR SEARCH THIS CLASS, SUB-CLASS:  
487, for disposable bedclothing made from paper.  
924, for devices under the class that include cardboard.
- SEE OR SEARCH CLASS:  
428, Stock Material or Miscellaneous Articles, subclasses 17+ for treated flora.
- 952 Comprising artificial fiber:**  
A collection of documents under art collection 948 disclosing the use of various manmade fibers as a filler for a body support.
- SEE OR SEARCH CLASS:  
428, Stock Material or Miscellaneous Articles, subclass 74 for sheet encasing fibered material, subclasses 357+ for
- 953 Comprising structurally defined foam material or configuration:**  
A collection of documents under art collection 948 disclosing the use of an expanded cellular substance having unconventional physical or chemical properties.
- (1) Note. Since expanded cellular foams are conventional materials of construction for body supports, placing a document in this subclass requires some inherently unconventional chemical or physical property of the foam, or the foam must have been modified by the addition of other materials to exhibit an unconventional physical or chemical property.
- (2) Note. Unusual foam configurations can include the use of chunks, chips, layers, blocks, or unusual shapes and sizes of conventional foams, or an unusual aggregation, such as layering of conventional foams.
- SEE OR SEARCH THIS CLASS, SUB-CLASS:  
655.9, for cushion-type supports comprising foam materials.  
740, for mattresses with unusual foam material or configuration.
- SEE OR SEARCH CLASS:  
297, Chairs and Seats, digest 1 for chairs or seats comprised of foam materials.
- 954 FIREPROOF:**  
This subclass is indented under the class definition. A collection of documents disclosing the use of materials especially useful in constructing supports that have fireproof or fire resistant properties.
- (1) Note. This collection excludes fireproof mattresses that are adapted to support substantially the whole body of a user and bedclothing that is fireproof.
- SEE OR SEARCH THIS CLASS, SUB-CLASS:  
483, for fireproof bedclothing.  
698, for fireproof mattresses.

**SEE OR SEARCH CLASS:**

- 297, Chairs and Seats, digest 5 for chairs and seats with fireproof components.
- 428, Stock Material or Miscellaneous Articles, subclasses 443+ for composite laminate including asbestos and subclasses 920+ for fire or heat protection feature.

END