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#### (54) STRUCTURE FOR A VENTILATED MATTRESS

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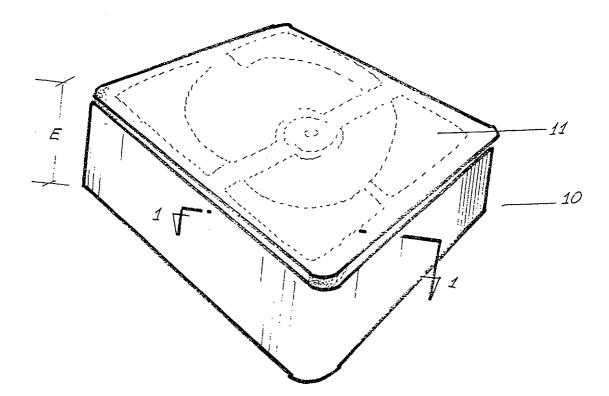
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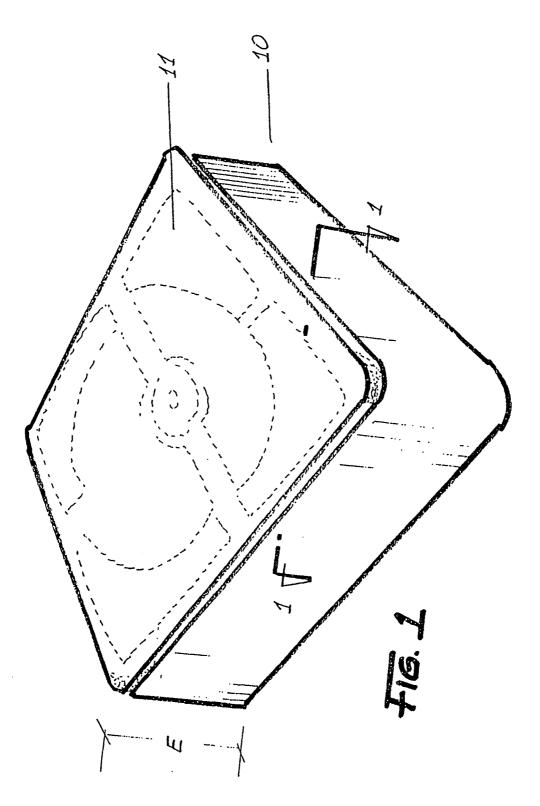
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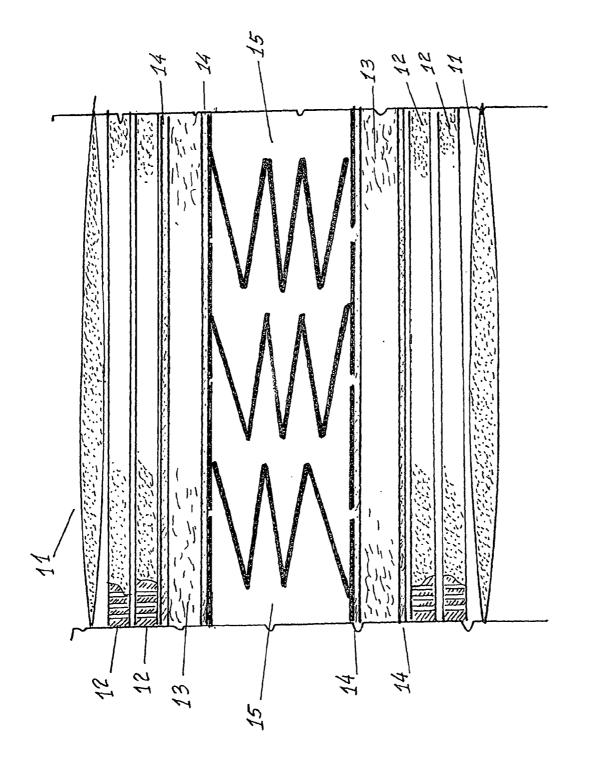
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#### (57) ABSTRACT

A mattress including textile layers or covers which are padded by a foamed, cross-perforated latex layer in the inner structure of the mattress in such a way that a ventilated and heat-dissipating mattress configuration is achieved.









### STRUCTURE FOR A VENTILATED MATTRESS

#### OBJECTIVE

**[0001]** The model herein is related to improvements introduced in the manufacturing of mattresses, based on the introduction to more natural latex rubber layers expanded with ventilation channels, which combined with the mattress spring structure provides a resistance and softness mixture model to the user.

**[0002]** The objective of improving the current structure of mattresses is the introduction of natural materials in the intermediate layers without significant contribution of polymeric derivates or materials, which sometimes lead to allergic effects to the user. Another objective is to promote a mattress model that with latex layers permit the dissipation of heat given the perforations thereof as a result of its expanded confirmation, giving the mattress a ventilated elements quality.

**[0003]** Likewise, the new mattress models permits on its structure the joining of cover padded elements with the latex or rubber layer sewed in the case of external layers, upper and lower, for the proposed model is of double face permitting it to be turned upside down to be used by both sides at the option of the user.

**[0004]** These and other objectives will become evident along the following description and observation of the annexed figures, wherein:

[0005] FIG. 1 is a general view of the mattress model.

[0006] FIG. 2 is a transversal cut of the width of the mattress through line I.

#### DESCRIPTION

[0007] The mattress 10 of our invention model (FIG. I) is mono-block, prismatic, rectangular element, generally with a layer or padded cover 11 with superficial design and patterned, stuck to an overlapped rubber layer to another similar one and other layers that we will detail below for configuring the width of the body that by its lower face repeats again the padded cover 11.

[0008] FIG. 2, in a way of diagonal cut of the mattress body 10 on its width shows on its order:

- **[0009]** a padded layer **11** in textile or gender generally of 75% cotton and 25% polyester, which is stuck to
- [0010] a natural rubber lamina 12 in latex of approximately 35 mm width overlapped to another similar one
- **[0011]** a plush of natural sisal **14** of 10 mm width, which at the same time contacts its lower face with
- **[0012]** a natural cotton **13** layer of 20 mm width in 2 layers, overlapped to
- [0013] another sisal plush 14 resting on
- [0014] a metallic spring unit 15, caliper 13 with a diameter of 75 mm and height of 125 mm.

[0015] The second cover of the mattress structure is repeated spring from the lower face of the spring unit with a sisal plush layer 14 the cotton laminas 13, the sisal plush 14, the latex rubber layers 12 and the cover padded 11, providing a symmetric structure configuration to the mat-

tress width, which permits such model to be turned upside down for its use by both sides.

[0016] For illustration of the proposed model dimensional scope, the width of the mattress can reach 40 cm+-0-1 cm, if we consider the size of each component, brought as illustration. Some characteristics of the mattress structure elements are as follows:

- [0017] The latex laminas or layers or natural rubber layers on its 35 mm width are produced through the Talalay system and the superficial perforations made by the mold during the latex aspiration expansion, giving raise to a superficial and passing perforation of the formed layer permitting when using the mattress a ventilation of the mattress, dissipating heat, contrary to synthetic foams that produce heat.
- **[0018]** The natural sisal layers making contact with the metallic structure of the spring unit faces act as a support of the agglomerated fibers of processed cotton. This sisal undergoes a process from the sun dried fibers, which are unfolded in plates later permitting agglutination and interweaving of fibers for producing a cover or carpet that is cut in accordance with the carpet incorporation measures.

**[0019]** As outstanding items in the manufacturing technology of our model we find:

- **[0020]** padded covers on the union by sewing of the gender cover and the latex
- **[0021]** latex and metallic spring combination providing firmness and elasticity to the mattress
- **[0022]** the perforated latex layer for providing ventilation of the mattress and dissipating heat
- **[0023]** the incorporation of natural products discarding the use of synthetic elements with its eventual allergic effects and others.

**[0024]** Therefore the scope of the invention in accordance with the described and illustrated model is defined in the following list of claims:

**1**. A mattress model whose composition structure is characterized by:

- an outer textile padded layer sewed to a natural latex or rubber
- one of two natural rubber or latex layers perforated and passing over its width, overlapped to:
- a manta or carpet of sisal resting over:
- a cover of one or two natural cotton layers, also overlapped to:
- a second manta or carpet of interweaved sisal, resting over:
- a spring unit metallic frame or structure, preferably helicoidal
- such fitting mentioned elements overlapped between them making up a first cover of the mattress, which is symmetrically repeated until reaching the other end face of the mattress.

2. Mattress model in accordance with claim 1 wherein the layers in the form of upper and lower covers are made up of a padded material integrated by the stuck to a textile material layer in cotton and a latex or natural rubber foamy layers and with perforated passage.

**3**. Mattress model in accordance with claim 1, characterized by the internal composition structure through the mentioned overlapping components making up a ventilated unit dissipating heat, whose ergonomic fitting is made up by the natural latex combination and the metallic spring unit.4. Mattress model in accordance with claim 2, character-

4. Mattress model in accordance with claim 2, characterized by the internal composition structure through the mentioned overlapping components making up a ventilated unit dissipating heat, whose ergonomic fitting is made up by the natural latex combination and the metallic spring unit.

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