# MATTRESS WITH ADJUSTABLE HARDNESS AND COMFORT LEVELS

## Field

Various embodiments relate to the mattress where the hardness and comfort levels may be adjusted by the user with changing the arrangement of the layers on the left and right sides of the mattress.

## Background

The mattress has become an essential requirement for people. The consideration is the people need a mattress that can provide a comfort and getting a better quality of sleep.

Currently it has been provided various types of mattresses with soft, hard and even very hard characteristics. Many consumers are eventually confused when choosing and purchasing the right mattress, particularly in terms of selection of mattress hardness level that may provide comfort for himself and/or his spouse.

Errors in buying a mattress are generally happening for example is too hard or too soft therefore it does not provide an appropriate comfort for the users. This certainly causes its own problems. A mattress has been purchased usually could not be exchanged, refunded, changed or set the hardness level. Sell and buy back a new mattress are not an effective and efficient problem solving because the consumers have to spend an additional costs.

It should be understood that every human has different body profiles, likewise with his spouse in the mattress. Someone may frequently require a hardness level of the mattress harder than otherwise needed by his spouse but the mattress products are available today only provide the same hardness level on both sides of the mattress. Thus as a

result, one of the users must feel uncomfortable when sleeping because the hardness level of mattress does not fit with his body profile. Furthermore, the changing needs for hardness level of proper mattress for him and/or his spouse may caused due to an age, health, pregnancies, body weight, injuries factors, etc. The mattresses were initially fit then could be no longer appropriate because of those changes.

**Summary**

According to the problems mentioned above, various embodiments aim to overcome the existing problems by providing a mattress with adjustable hardness and comfort levels by the user thus able to provide more comfortable sleeping.

The mattress with adjustable hardness and comfort levels includes the surface cover layer, first comfort layer, second comfort layer and hollow space made of foam at the bottom.

This mattress provides the flexibility for consumers to change materials arrangements in the mattress or commonly known as a comfort layers to achieve the most appropriate hardness level according to his body profile independently for the users on the left and right sides of the mattress. Consumers may also change the hardness level of their mattress easily as they desired by opening the zippers, adhesive or buttons to take the comfort layers contained in the mattress anytime.

These comfort layers are independently separate parts on each side that would be ravished by the user; on the left and right sides of mattress. Thus each spouse may adjust the most suitable hardness level itself against his body profile on the side of his mattress without affecting the hardness level of his spouse.

The adjustable comfort layers includes one or more materials in the form of foam, latex, synthetic fibers,

natural fibers, gel or spring materials that may be reversed and changed its arrangements order among each other (if more than one layer) to produce the combination of most appropriate hardness and comfort levels with the user desires.

**Brief Description of Drawings**

Figure 1 shows the perspective view of mattress with adjustable hardness and comfort levels by the user.

Figure 2 shows the structure of forming part of mattress with adjustable hardness and comfort levels by the user.

Figure 3 shows the arrangement of hardness and comfort levels when it will be used for two people.

**Detailed Description**

Referring to Figure 1, there is shown when a mattress with hardness level may be adjusted by the user in the position has already been arranged and closed by surface cover layer (A).

Referring to Figure 2, there is shown how the structure of mattress layers with hardness level may be adjusted by the user in the open position or still not yet arranged. The mattress includes a hollow space (D) made of foam. The hollow space (D) is filled with the first comfort layer (B) and the second comfort layer (C) where the placements of layers are interchangeable and may be reversed. The comfort layers (B) and (C) may have the different hardness nature thus, when the arrangement is changed and their surface also reversed, it will produce a different hardness and comfort levels.

Referring to Figure 3, there is shown the large mattress (for example, the mattress size is 2 meters x 2 meters) when used for two people. On the left and right sides have each

surface cover layer (A), comfort layer (B) and comfort layer (C) thus the hardness and comfort levels on each side may be different. The surface cover layer (A) is a layer or cover panel of mattress surface ravished by the user and it may be opened partially or entirely thus the user may take and arrange the comfort layers (B) and (C).

In this embodiment, the first comfort layer (B) and the second comfort layer (C) may be made from foam, latex, synthetic fibers, natural fibers, gels or a spring materials.

In this embodiment, the installation of layer (A) to the hollow frame (D) made of foam may use Velcro, zippers or buttons adhesives.

It should be noted that without departing from the spirit and scope of the invention, the implementation of the embodiments of the present invention is not limited to the shape, size, dimensions, models, and the placement of arrangements order. The embodiments described above are merely illustrative to clarify the new and simple techniques. The applicant believes that this technique has never been used by the mattress manufacturers both domestically and overseas.

**Claims:**

1. A mattress with adjustable hardness level by the user, the mattress comprising:

surface cover layer (A) could be opened partially or entirely by the user which serves to cover the surface mattress when the first comfort layer (B) and second comfort layer (C) has been arranged;

first comfort layer (B) and second comfort layer (C) wherein the layers have different hardness properties thus when the arrangements are changed and the surface may be inverted, these create different variations of hardness and comfort levels;

hollow space (D) made of foam to place first comfort layer (B) and second comfort layer (C).

2. A mattress according to claim 1, wherein the first and second comfort layers made of foam, latex, synthetic fibers, natural fibers, gel or spring materials that can be reversed and changed its arrangements order to achieve the most appropriate hardness and comfort levels to the users.

3. A mattress according to claim 1, may be designed for use by two people wherein each user can change the hardness and comfort levels his own mattress side without affecting the hardness and comfort levels on the mattress sides of other user.

4. A mattress according to claim 1, wherein the mattress comprises comfort layers only or springs as part of the buffer layer.

5. A mattress according to claim 1, wherein the surface cover layer of mattress could be released partially or entirely.